

**Supporting the Professional Learning of Student  
Teachers of Primary Education: the Teaching Practice  
Period in Taiwan**

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## Abstract

This study explores the learning experience of twenty primary school student teachers undertaking teaching practice in Taiwan. It aims to answer two research questions: (1) Which factors enhance or hinder the professional learning of Taiwanese student teachers during their teaching practice?, and (2) How do these factors influence their development as beginning teachers and their broader learning experience? These two key research questions are explored using three approaches: sociological, reflective, and developmental.

This research is based on case studies from a particular context and time, and is restricted to the learning experience of twenty student teachers undertaking teaching practice in Taiwan. The field-work consists of interviews, critical incident interpretation and reflective journals, which together provide a thick description of the student teachers' learning experience.

The analysis is based on an overview of the learning experiences of all twenty student teachers and their mentors, with a particular emphasis on two individual case studies followed by a cross-case study. The overview is used to explore the process of professional development and to identify the factors which improve or hamper the learning of student teachers, while the three studies are employed to examine the process of socialisation and the reflective practice of student teachers.

I conclude that the setting of the teaching practice period in Taiwan improves the professional learning of student teachers. However, not all student teachers benefit

from the setting, because a combination of factors such as personal dispositions, interactions with mentors and school leadership can hinder their learning.

The implications of the study have led to five recommendations about the nature of support for student teachers, the time needed to learn how to behave like a teacher and the structure of the teaching practice. These are discussed in detail in the final chapter.

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## Content

Chapter 1 Introduction .....	01
Chapter 2 Teacher training in Taiwan .....	10
Chapter 3 Studies relating to student teaching .....	30
Chapter 4 Methodology .....	73
Chapter 5 Factors which influence the learning and teaching of student teachers .....	104
Chapter 6 Lin's teaching experience .....	131
Chapter 7 Zhang's teaching experience .....	168
Chapter 8 A pen portrait of the remaining eighteen student teachers ...	206
Chapter 9 Overall review of the learning experience of twenty student teachers and the changes in their teaching .....	218
Chapter 10 Conclusion and Suggestion .....	257
Bibliography .....	274

## Appendix

## **Terminology**

The study refers to 'probationary teachers', 'student teachers', and 'beginning teachers'.

The differences between the three terms in Taiwan are explained as follows.

Probationary teachers: Before 1997, student teachers were obliged to undertake a year's probation after studying for four years at university, and during this year they were called probationary teachers. When teaching, their responsibilities were similar to those of fully-qualified teachers: they taught alone and took charge of a whole class. Probationary teachers were awarded a certificate showing them to be qualified teachers after they passed the appropriate assessment. There is no longer a probationary period in Taiwan and therefore there are no probationary teachers.

Student teachers: Before 1997, student teachers were those who were studying at normal universities or teacher-training colleges. After 1997, student teachers were those who had completed initial teacher training, including university studies and the teaching practice period afterwards, but had not yet been awarded a qualified teacher certificate. Student teachers who pass the evaluations, which are conducted by school mentors, school leadership and university tutors, achieve qualified teacher status at the end of their teaching practice period and, as noted above, do not have a probationary year.

Beginning teachers: This term refers to those who are qualified teachers and have been teaching for just one or two years.

Teaching practice period: This term refers to the time period when student teachers undertake their teaching practice after they have completed a certain number of credits (in institutes of education they should achieve 30-32 credits whilst in related colleges of education the requirement is 128 credits). In Taiwan, student teachers can do their teaching practice either between July and the following January or between February and June.

In some studies, the terms 'professional learning', 'professional development', and 'professional knowledge' are used interchangeably. However, in this study each term has a specific meaning and refers to a particular aspect of student teachers' professional experience.

Professional learning: This refers to how student teachers learn during teaching practice, for example, how they cope with teaching difficulties and the relationship between pupils and mentors. A teacher's professional learning is the process of learning their professional knowledge, skills, and attitudes in teaching. This process of learning provides opportunities for teachers to examine and challenge their assumptions against their teaching expertise, to integrate theories and practice, and to experiment with teaching tactics. There is also learning that develops new understanding of the content that they teach, the students they encounter in classroom and how their students learn (Timperley, 2008).

Professional development: This term refers to the crucial characteristics of stages or phases in the learning-to-teach of student teachers. For example, at the idealist stage student teachers have not started to teach, and their teaching perspectives are idealist, while the survival stage refers to student teachers who are struggling in teaching.

Professional knowledge: This refers to the content which student teachers should learn for teaching, such as the subject matter and knowledge of learning and learners.

# **Chapter 1**

## **Introduction**

### **1.1 Background**

My interest in researching the experiences of student teachers has its origins in my experience of being a probationary teacher in a middle primary school in a suburban area of Taipei City in Taiwan, starting from August 2006. The school had fewer than twenty classes and about 600 pupils, and I was assigned as a class teacher for a sixth-grade class (twelve-year olds). Like other probationary teachers, I did a great deal of preparation for my teaching over the months that followed, including reading teaching manuals for the subjects which I would teach and consulting several experienced teachers for advice about teaching strategies. My colleagues in the primary school were friendly and helped me whenever I asked them. Nonetheless, I was conscious that my senior colleagues had their own heavy workloads and therefore I felt hesitant about consulting them. When I started teaching, the situations in my classroom went far beyond what I could imagine or handle. I taught alone in the classroom and it seemed that my teaching expertise had not improved by the time that I finished my first year of teaching. In addition, my teaching seemed not to have benefitted from my four years' of study at the university, leaving me struggling and anxious during the whole probationary year. During that period, I began to doubt my ability to be a teacher and wondered what my life as a teacher would be like in the future. At the end of the probationary year, my performance was evaluated by my school and my tutor. Luckily, I passed, but the evaluation was based solely on scores on a paper document, and there was no observation of my teaching. I did not feel that my teaching expertise had significantly improved and therefore, disappointed, I left teaching. If my probationary

year had occurred under the current teacher education system, I think I would have successfully gone into teaching after it. My personality may have been the reason why I felt that my performance in 1996–1997 was unsatisfactory, but had I been properly supported, as is the case with the teaching practice period today, the outcome might have been different.

My teaching experience made me interested in the learning experiences of other primary student teachers, and I found that I was just one example of a teacher with unhappy experiences that could be found among some of my fellow probationary teachers. At the time, I thought that modifications should have been made to the programme. However, modifications were only considered by the Taiwanese government in the wake of intense discussions about teacher training which had begun in the 1990s among educational academics and policy makers in the USA and the UK about how to improve the learning-to-teach experience of student teachers and to deal with the problems of recruitment and the high turnover of teachers. Concerned with catching up with educational trends, the Taiwanese government and a wide range of educators became more interested in the improvement of teacher-training programmes. In the past fifteen years, teacher training has become a key issue in Taiwan and some studies have been devoted to the topic (Chiu, 2002; Guo, 2003; Teng, 2003). Up until 1997, modifications to teacher-training programmes were mainly borrowed from programmes abroad, especially from the USA and the UK, but due to limitations in the educational budget only slight changes were made. Since 1997, the Taiwanese government has considered attempting to make better arrangements for student teachers, from recruitment and the type of support provided (both in 1997), to the duration of teaching practice and its position in the Taiwanese teacher-training

programme (both in 2006). For example, several articles and books have been devoted to analysing and exploring this issue, particularly the implementation of teaching practice, and partnerships have been developed between universities and schools (Chiu, 2002; Yeh, 2002; Teng, 2003; Ding, 2003; Guo, 2003). However, there has been a very limited focus on what student teachers have learnt during their teaching practice, and how they have learnt it. Thus, even though the schemes have been transformed over the past twenty years, whether new educational methods have improved the learning of student teachers is still a subject for debate and investigation, especially as this relates to teaching practice.

In countries such as the UK and the USA, the teaching practice period exists to provide student teachers with an opportunity to gain some teaching experience at the start of their teaching career. It is usually considered to be a bridge between university learning and teaching as a qualified teacher in a school. Learning to teach in a university limits student teachers to the university classroom and to studying from textbooks. This is far from sufficient preparation for practical teaching. In the teaching practice period, student teachers come to understand what a teacher's life is like in a school by learning how to manage the classroom, both as regards teaching and handling whatever situation arises. In other words, it is at this point that student teachers learn to behave like teachers, bringing their learning from university and their personal experience of teaching into the classroom. Crucially, they are supported by mentors, either from the school or the university or from both (Hobson et al., 2009). This period of time also provides an opportunity to apply or test teaching perspectives in relation to a range of teaching activities.

The Taiwanese teacher-training scheme is similarly designed, and consists of two main activities: university learning and teaching practice. University learning equips student teachers with the necessary knowledge for teaching through lecturing in classrooms, whilst teaching practice aims to provide them with practical knowledge by bringing personal teaching perspectives into their teaching. The period of full-time teaching practice in school classrooms occurs after student teachers complete their teacher training in universities, and more detailed information about this will be provided in the next chapter.

I found that many studies relating to teaching practice in Taiwan are more concerned with respondents' opinions about aspects of the teaching practice period, rather than with the learning experience itself. Thus I wanted to focus on what the teachers said about their experiences, rather than evaluate whether the policy was being implemented successfully. Yang *et al.*'s (1991) study is concerned with the perception of teaching practice by what were then known as probationary teachers. It concluded that support from higher education institutions and schools was scarce because student teachers almost completely lost contact with their tutors from their higher education institutions, since the tutors only visited schools once during the one-year probationary period. As well as Yang *et al.*'s (1991) study, related studies (Chiu, 1992; Lu, 1992; Lin, 1993; Wang, 1996) also highlighted that the teaching practice scheme was inefficient at helping probationary teachers deal with the reality of the classroom, and that it failed to provide sufficient support for teaching and classroom management. One study concerned with the learning of student teachers was conducted by Lin (1997), and, in the same vein as previous studies, its findings indicated that university learning had little impact on student teachers' teaching beliefs. Most probationary teachers found it



difficult to apply the knowledge they had learnt in universities to teaching: classroom management was hard to cope with, with the result that probationary teachers felt frustrated. This was the scheme that was in place when I trained. All of these studies were concerned with the period before the changes to teacher training were implemented and they focused on whether and which new approaches to teaching practice were working; not *how* and *why* particular approaches were or were not working.

These studies reflected the respondents' perception of the teaching practice period, and they can be used by researchers as reference points for revising the regulations. However, the studies failed to look in depth at the learning experiences of student teachers, and thus they did not provide a firm empirical basis for changing regulations to improve the learning experience of teaching practice. For example, respondents were asked whether or not they were satisfied with the support they received from mentors, or whether or not they were satisfied with what they had learnt during classroom practice. Either way, we learn only whether or not the respondents were satisfied with the implementation, rather than how any problems were caused or might be rectified.

Clearly, the main reason I chose primary student teachers as my research topic is because I have been a probationary primary teacher myself. My teaching experience allowed me to understand and empathise with how primary student teachers learn to teach. Thus I could look in depth at their teaching practice and interpret their reporting of their experiences knowledgeably.

## **1.2 Purpose of the study**

In this research I explore in depth the learning experience of a group of primary school student teachers, with a particular concern for three aspects of their experiences. My first aim is to understand whether or not student teachers can transfer their university learning into teaching practice by reflective practice. As indicated above, student teachers learn a great deal of information at university. However, one of the concerns of this study is how student teachers transform this knowledge during the teaching practice period, through a complex part-constructed combination of their personal experience, their understanding of school context and by their consideration of the situations in classrooms they encounter. The literature suggests that what is learnt at university does not become linked to teaching practice until very late in the teaching practice period, but I suspected that the link in fact occurs much earlier, and I wanted to explore this. Second, I investigate the range of factors that improve or hamper the learning experience of student teachers. Third, and perhaps most important, the current study is distinct from works restricted to the implementation of the arrangement of teaching practice in that it also considers how student teachers acculturate to the school environment, learn how to teach during the teaching practice period (investigated in Chapter 3), and whether they start to reflect on their university studies during the teaching practice period. This is something which has not been done before in studies related to Taiwan.

As I indicated in the previous section, several studies concerning the teaching practice period have been conducted over the years in Taiwan. However, my research is distinct from them because I explore how and what student teachers learn during the teaching practice period. This study is not only valuable for its singularity as a particular case

study. It also provides an important reference for policymakers and teacher-training professionals in Taiwan and around the world. It explains how student teachers learn and the factors that affect their experience during the teaching practice period, so that adequate modifications might be made for the improvement of teacher-training schemes.

### **1.3 Research Questions**

For these reasons, the current study is entitled '*Supporting the Professional Learning of Student Teachers of Primary Education: the Teaching Practice Period in Taiwan*'. As its name suggests, it investigates learning about teaching by student teachers in the teaching practice period. The following two research questions are addressed:

1. Which factors enhance or hinder the professional learning of Taiwanese student teachers during the teaching practice?
2. How do these factors influence their development as beginning teachers and their broader learning experience?

The first research question considers the common factors, if any, that emerge from the review of the two case studies and a cross case study of all twenty student teachers, including comments from their mentors. These are analysed in Chapter 5. The second question is addressed through the same two case studies and is amplified by the cross case study. These are explored between Chapter 6 and Chapter 9. The design of the research questions aims at investigating what and how successful student teachers learn and teach in this period, shedding light on how the context of the teaching practice period might be improved and reducing the likelihood of unsatisfactory teacher learning during this period.

## 1.4 Thesis Structure

In this thesis, the chapters are organised as follows:

In Chapter 2, I will explain the school system and teacher training in Taiwan. This will include general approach to education, especially schooling, in Taiwan, the scheme for teacher training and the teaching practice period in Taiwan.

Chapter 3 will present the literature review for the thesis. In this chapter, I will review critically studies concerning teacher socialisation and teacher reflection and teacher development. Then I will review the literature concerning the development of pedagogical content knowledge. I consider that student teachers accommodating to school environment at the beginning of their teaching and then formed their personal teaching perspective. Then their teaching perspectives are challenged by alternative perspective offered by mentors or research. At the end of this chapter, a model of teacher development of student teachers will be developed and discussed from my reflections on the literature. This model will be examined and modified as appropriate by the empirical study, which will be examined in the findings' chapters.

In Chapter 4, I will state in detail the research strategy and data collection methods. The reason case study is chose as the research strategy is articulated. Then I will explain how and why the data are collected, including sampling, and how they are analysed.

In Chapter 5, I will demonstrate the overall review of the factors which emerge from the data about the factors that influence the professional learning of student teachers in the teaching practice period. In the end of this chapter, I will present a newly modified model of the professional learning of student teachers in the teaching practice period.

Subsequently, in Chapter 6 and Chapter 7 two case studies of student teachers will be described and analysed, with a view to revealing in considerable detail how factors, especially in the connection between dispositions of student teachers and mentoring, influence the professional learning of two student teachers in Taiwan. Further, the pen portrait of the remaining 18 student teachers will be offered in Chapter 8 and then how these factors influence the learning-to-teach of all twenty Taiwanese student teachers will be demonstrated in Chapter 9.

In the final chapter, Chapter 10, I will conclude the thesis and present the implications and suggestions concerning this study.

## **Chapter 2**

### **Teacher training in Taiwan**

As indicated by my three research questions at the end of Chapter 1, the aim of this study is to identify how the learning experience of student teachers affects their teaching practice. I am confident that different cultures and societies produce different contexts for teacher training and different learning experiences for student teachers. For example, in a country where teachers have a higher social status, they enjoy greater authority and students and parents respect them. Thus, beginning teachers or student teachers may have to deal with less poor pupil behaviour than is the case in countries where there is less respect for teachers, and they therefore quickly gain confidence in their teaching. The process will be different for student teachers from different countries.

In this chapter, I explore the socio-cultural context of primary school education in Taiwan and the substance of initial teacher education. This provides the background for an understanding of the dispositions of student teachers and of the situations in which they teach. To illustrate the specifically Taiwanese aspects of the background and teacher-training contexts, I draw some comparisons with the context in England, because this study was undertaken in an English university setting.

#### **2.1 Context for teacher education in Taiwan**

In this section, I briefly give an overview of the social background of teachers and of primary education in Taiwan.

### 2.1.1 The profile of teachers in Taiwan

Teachers enjoy a high social status in Taiwan. In a study relating to Taiwanese teacher status, Fwu and Huang (2002) note that, due to the influence of traditional Chinese culture, teaching is a highly respected career. In China, teachers are considered to be learned persons who impart the True Way (*duo*) of life to their students. The operations of the True Way in nature, human society, and domestic relationships are regarded as profound, so that only the teacher is able to fully realise the True Way's essence and explain its practical operation in three spheres: nature (heaven and earth), politics (the emperor), and the family (parents). The teacher is still respected in this way today and in terms of morals and intelligence is still placed on the same level of worship as 'heaven, earth, emperor and parents' in the temples (Guo, 1999). This is represented in a Chinese maxim: 'One should respect one's teacher as if he were one's father even if the teacher-student relationship exists only for a single day.' These traditional values concerning the high status of teachers are still alive in Taiwanese people's minds today. Each year on Teachers' Day (28 September), official ceremonies are performed in the Temple of Confucius to commemorate 'the Supreme Master Teacher'.

This tradition affects the relationship between teachers and pupils, as well as teachers' teaching beliefs. Teachers enjoy great authority in the classroom and pupils are obedient. Keeping order in the classroom and maintaining authority used to be considered to be the priority of teachers. This idea was and still is prevalently accepted in Taiwan and sometimes taken as being the main criterion of good teaching. This is also reflected in the traditional teaching approach of teachers. The transmission of

knowledge has long been considered to be the main teaching activity of teachers: they deliver knowledge to students and help them to overcome their confusion in learning. However, in recent years, teachers of the younger generation have gradually adopted a western educational approach. They prefer to have a good relationship with students, and their teaching beliefs tend to focus more on the learning needs of their pupils.

The social status of teachers is also reflected in their income. A high salary makes teaching an attractive and competitive career, and this has both positive and negative effects on the profession. The positive aspect is that the average income of a teacher is comparatively higher<sup>1</sup> than the average professional wage, and teaching is considered to be a steady career. Thus, teaching has become a popular career choice in Taiwan and many intelligent people are attracted to joining the profession. The negative aspect, by contrast, is that, as a result of Taiwan's reduced economic performance in recent years, obtaining teaching posts has now become extremely competitive. The scarcity of teaching posts influences the quality of student teachers. For example, according to a report in Taiwan's leading newspaper (*United Daily News*, 17 July 2008), in most regions in 2008 less than 2% of qualified primary school teachers who were candidates for teaching posts were successful applicants. Indeed, the rate in one county was reported to be only 0.6%. The problem can also be seen in the results of university entrance examinations in recent years. As the fierce competition for teaching posts increasingly results in a great number of unemployed qualified teachers, it is evident that even the best students will have difficulty in securing teaching posts. Therefore, many potential applicants who are of the best calibre will instead choose training in another profession, which is more likely to offer them good career prospects. Institutes

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<sup>1</sup> According to the Ministry of Education in Taiwan (2007), the average annual salary of a first-year teacher is \$18,188 and the overall national average is NT\$16,768.



and departments of education in universities cannot recruit the same quality of student teacher as they did in the past ten years or so, when student teachers had to be in the top 25% of all candidates in Taiwan for their year.

The Taiwanese context can be compared with England, where the social status of teachers is relatively low. In a survey conducted by the Department of Children, Schools and Families (2007), teachers were regarded as comparable with social workers, and head-teachers with management consultants. In Taiwan, teachers are considered to be on a par with architects, and principals of primary schools with engineers (Fwu and Wang, 2002). Teaching posts are not so competitive in England. According to an October 2010 report in *The Times Educational Supplement*, 18 primary schools said that they still had teaching posts available, even though this was a full month after the beginning of the school year. This level of teacher vacancy does not occur in Taiwan.

### **2.1.2 Primary education in Taiwan and the work of primary school teachers**

In Taiwan, children undergo compulsory education between the ages of six and fifteen (Ministry of Education, 2006). In the 2006 academic year there were 2,651 primary schools, of which 2,615 were public and 36 were private. In total, 1,798,436 students were studying in primary schools, taught by 101,682 teachers (32,354 male and 69,328 female). In the larger cities and towns, schools usually have over 1,000 pupils. It is worth noting that these schools are larger than is the case in England, where the average number of pupils in a primary school is 230. However, both countries are similar as regards class size, with around thirty pupils per class. This means that the school

management workload in Taiwan is heavier than in England. The existence of larger schools may be due to the higher population density in Taiwan. More than 95% of Taiwanese people live on the plain region, which forms one-third of the area of Taiwan, and the density can easily reach more than 1,500 people per square kilometre. Children finish primary education at age twelve. Afterwards, from thirteen to fifteen, they become students in junior high school, where they receive their first three years of secondary education.

The school management team in a primary school consists typically of one principal or head-teacher, a head of teaching affairs, a head of student affairs, a head of general affairs, a head of student guidance, a head of personnel, and a head of accounting. There are usually several smaller sections in each office. Head-teachers or heads of the school office are usually experienced teachers who receive higher payment and whose posts involve less class time. Similar to the practice in England, the salary of teachers generally increases yearly, in the case of teachers in public schools eventually reaching the highest rate allowed. Teachers can apply for retirement when they have taught for twenty five years or when they reach sixty years old. Primary teachers can either be a class teacher with responsibility for one classroom, or a teacher of a particular subject in different classes. A teacher can also be a school manager as well as a teacher. These schools have very stable staffing, as was noted above, and teachers do not move from school to school anywhere near as often as in England. Thus, advertisements for primary school teachers are rarely seen in newspapers during the school year.

The subjects taught in primary schools, according to the Grade 1–9 Curriculum Guideline announced in 2001, comprise language arts, health and physical education,

mathematics, social studies, arts and humanities, science and technology, and integrative activities.<sup>2</sup> The amount of time given to each subject varies according to the pupils' grade by age. Each subject also has its regulated competence indicators or benchmarks, which allow teachers to understand the learning outcomes pupils should achieve. Class teachers usually take charge of more than three-fifths of all the weekly classroom teaching, and in non-contact time do teaching preparation and review homework and teacher–parent communication books.<sup>3</sup>

The main job of teachers in schools is teaching. However, class teachers also have additional pastoral duties. Teachers usually start their working day no later than 8am, and class teachers usually arrive earlier to supervise students' cleaning work. This is an activity which is designed to give the pupils a sense of discipline and responsibility. The daily teaching schedule usually consists of seven teaching sessions and each session lasts forty minutes. All subjects are well-distributed in the teaching sessions over a day. A period for the pupils to have a short sleep is also frequently arranged, usually after lunchtime. Teachers' work usually ends no later than 4.30pm and may end earlier in special circumstances according to region. During the school day, class teachers have to stay in their classroom the whole time, even including the lunch time and pupil sleep time, except during sessions taught by particular subject teachers. After their working day, teachers sometimes visit pupils' homes to make contact with parents if necessary. These visits give teachers an opportunity to understand the families of their pupils, especially pupils with problems in learning or behaviour.

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<sup>2</sup> Integrative Activities include consulting activities, boy- or girl-scout activities, and group activities.

<sup>3</sup> Teachers usually use this book to inform parents about pupils' performance, homework requirements, and for making suggestions about the learning or behaviour of pupils. Parents may tell teachers through the books about pupils' home-life or in what ways they expect the teachers to help their pupils in school. Parents are usually asked to sign their names on the books to prove that they are well-informed about what happens at school.

Similar to England, Taiwan has a national curriculum. However, unlike in England, where pupils have to take exams at age 11 before going on to secondary school, no national examination has to be taken by Taiwanese primary school pupils. Instead, pupils progress automatically as they get older. It seems that British primary teachers are under greater pressure to help pupils improve their academic achievement, and to cope with national examinations in which a great deal is at stake. Also, as English and mathematics are particularly emphasised in English primary schools, these two subjects generally occupy most of the morning teaching time. In Taiwan, these subjects are distributed across the class schedules in both the morning and afternoon, although sport sessions are usually scheduled for the afternoon.

To summarise, the context of primary school teaching in Taiwan is quite different from that in England. This is reflected in three main aspects. First, Taiwanese teachers have a higher social status, and this can be seen in their salary and in the competition for teaching posts; second, Taiwanese teachers experience less stress in their teaching because they do not have to help pupils deal with highly-significant national examinations; and third, the curriculum in Taiwan is broadly distributed, whereas the curriculum in England emphasises English and mathematics.

## **2.2 Teaching practice before the 1997 reforms**

In this section, I highlight issues that were addressed in the new arrangements for teaching practice, beginning by looking the learning experience of what were then

termed probationary teachers. Following a brief introduction to the old scheme, a review of relevant studies is used to highlight the main issues.

### **2.2.1 The pre-1997 teaching practice scheme**

With a view to recruiting primary school teachers who had achieved at least a bachelor degree from university, five-year teacher-training colleges<sup>4</sup> were abolished in 1987 and upgraded to teachers' colleges with the same status as Taiwanese universities. This was the teacher-training scheme in which I participated. Teacher training at this time included four years of initial teacher education in a college and a one-year probationary period in a school, during which the probationary teacher's performance was monitored by tutors from the college. College tutors themselves had two or more years' experience of teaching in primary schools or in colleges, and their teaching hours were reduced. The schools that accepted probationary teachers were expected to establish a group to support them, comprising three to six people of whom at least half should be school mentors. However, this group did not teach alongside the probationary teachers and they provided only something akin to a consultation service. Probationary teachers who did not know the school environment felt hesitant about consulting mentors and might not have asked for this kind of support (that was my experience). The school mentors were chosen by head-teachers from staff who had at least three years' teaching experience and had performed well in their posts. Local education authorities maintained regular contacts with schools, and the schools which were seen to provide

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<sup>4</sup> The five-year teacher-training colleges were previously institutions particularly for the training of teachers for primary schools. The colleges' students were mainly junior high schools graduates, starting from age 15. The Taiwanese government terminated the colleges because it wanted to recruit senior high school graduates, and so attempt to upgrade the quality of the students.

the best support for probationary teachers were praised publicly. The assessment of probationary teachers was conducted by the schools and colleges.

The details of the probationary training year during this period were clearly defined, and the responsibilities of the colleges and schools were stated clearly in regulations, in terms of how student teachers were supported and how mentors were chosen. However, a study conducted by Yang *et al.* (1991) and sponsored by the Ministry of Education demonstrates that the policies adopted in the regulations were unsatisfactory in practice. First, because the distribution of probationary teachers was spread around Taiwan,<sup>5</sup> it was inconvenient for college tutors to visit them on a regular basis. For instance, I was never visited during my probationary year. Second, probationary teachers<sup>6</sup> did not receive adequate support from schools and some were still left isolated and unsupported in the classroom. This also matches my teaching experience as a probationary teacher. I was only observed once and the other probationary teachers in my school were never observed. Third, there was no stated standard for the assessment of probationary teachers and, despite guidance, some schools did not follow the regulations, making their final assessments questionable.

### **2.2.2 Problems with the pre-1997 teaching practice setting for probationary teachers**

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<sup>5</sup> Taiwan's area is 35,081 square kilometres, and the island is 150 kilometres across at its widest point and 400 kilometres at its longest. It is characterised by a contrast between the eastern two-thirds of the island, which consist mostly of rugged mountains running in five ranges from the northern to the southern tip, and the flat-to-gently rolling plains in the west that are also home to most of Taiwan's population of nearly 23 million.

<sup>6</sup> Probationary teachers are those who were inducted in the pre-1997 induction scheme, which was called the 'probationary year'.

Studies (Chen, 1996; Zhang, 1984; Zhang, 1991; Huang, 1996; Zhang, 1998; Lai, 1999) identified two main issues or problems relating to the probationary teaching year in the pre-1997 context. First, the probationary year setting was shown to have failed to enhance the teaching expertise of probationary teachers. Probationary teachers who learnt to teach in this system indicated that they did not perceive any concrete support for their teaching practice. Therefore, they felt anxious and nervous when facing difficulties with their teaching, and they felt that they had made limited improvement in their teaching expertise. Even when they sought help from their university tutors, they did not find satisfactory solutions to their problems. Chen (1996), who explored the teaching of probationary students through interviews and questionnaires, noted that the problems usually encountered by probationary teachers in Taiwan included maintaining classroom discipline, motivating students, dealing with individual differences between students' abilities, evaluating academic performance, building a relationship with parents, arranging teaching activities, a lack of teaching support from schools, and handling specific students' problems. The question of whether or not teachers' beliefs changed during the period of student teaching remains in dispute. Zhang (1984; 1991), who conducted a survey of 485 probationary teachers, indicated that they did in fact change during this time. However, Zhong-Ren (1994) conducted a quantitative study and suggested that although personal characteristics, the school environment, parents, and peers influenced the experience of student teachers in their probationary year, any changes in their beliefs were insignificant.

Second, the setting did not provide a suitable environment for probationary teachers to engage efficiently in reflective practice. Probationary teachers mentioned that the knowledge they had learnt in universities seemed to be impractical, so that they could

not apply it directly to teaching and classroom management, which probationary teachers considered to be the most difficult tasks (Huang, 1996; Zhang, 1998; Lai, 1999). Liu (1992) explored the teaching practice of two probationary mathematics teachers and found that they only conveyed information from textbooks and did not apply the pedagogy which they had learnt at university. According to the author, the most effective way to achieve a good standard of teaching is by accumulating teaching experience, and exchanging experiences with colleagues. Lin (1997) noted that probationary teachers had learnt their teaching strategies from textbooks and personal experience, and were inflexible when dealing with classroom contingencies. He also indicated that probationary teachers found it difficult to plan their teaching, because they had an inadequate understanding of which teaching materials to select and use. Guo (1997) also noted that the teaching plans of student teachers focused on how appropriately to demonstrate teaching content *per se*, rather than meeting learners' needs by engaging with pupils' backgrounds and the reality of the classroom. In addition, the pedagogy they learnt during university training was not applied to their teaching.

These two issues show two weak points in the organisation of the probationary year. First, the support structures were not properly designed and implemented, and they therefore did not provide an adequate environment for probationary teachers to engage in reflective practice, which, as I develop in a later section of this study, should be the main goal of teaching practice. Second, new teachers were isolated for most of the time during their probationary year and there was a lack of classroom support from mentors. The post-1997 reforms promised to provide an appropriate environment for student



teachers (previously called ‘probationary teachers’) and to help them to apply their university learning to teaching practice. This is discussed in the following section.

### **2.3 Teacher training since 1997**

In this section, I explain the current teacher-training system in Taiwan, exploring the context in which student teachers receive their teacher training and undertake their teaching practice. This section is structured in two parts: the learning experience prior to teaching practice, and the setting for teaching practice.

#### **2.3.1 The learning experience prior to teaching practice**

The new system for teacher training accommodates a greater number of prospective teachers from different academic backgrounds. University students usually access teacher training by two routes: (1) institutes of education for primary education in universities, or (2) related departments of primary education. Student teachers who intend to receive teacher-training programmes in institutes are required to have achieved certain standards of academic performance in their university studies. Training in university institutes of education, as initiated in 1997, is for 30–32 credits, but these are not for those majoring in education. In education-related departments, student teachers are recruited from senior high school students and receive study programme of at least four years related to teacher training. This is the traditional route, similar to the setting of the pre-1997 probationary year. This accounts for at least 128 credits, with education as the major. By the 2006 academic year, when I collected my data, twenty-four universities or colleges had established institutes and 11 had related

departments of education. The number of student teachers in the 2006 academic year was 4181 (Ministry of Education, 2007b).

These two training routes include a general study course, a subject-matter course, and a professional course. The general course covers the subjects which all students must take at university; for example, Chinese classics, Chinese history, and mathematics. The subject-matter course includes the subject knowledge which student teachers need for their upcoming teaching, while the professional course covers pedagogies and subjects associated with the practical and theoretical knowledge of education. Having completed university training, student teachers then have to undertake teaching practice for six months. Providing that their teaching skills are satisfactory and that they pass the paper-based examinations held by the Ministry of Education to test their academic knowledge of education, student teachers are then awarded a qualified teacher certificate.

The setting for teacher training in Taiwan is slightly different from that of England, where the dominant system of teacher training, the Post-graduate Certificate in Education (PGCE), is still a three- or four-year course at university, followed by a one-year teacher-training programme<sup>7</sup>. In England, when student teachers undertake

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<sup>7</sup> There are also other routes to teaching career in England: (1) The Graduate Teacher Programme: this programme allows teacher to be training and working in a paid teaching role; (2) School-centred initial teacher training: student teachers are taught by experienced, practising teachers, and often tailored towards local teaching needs; (3) Teach First: This programme requests student teachers to teach with the support of partner schools, businesses and universities and wanted them to be effective teachers and leaders in challenging schools; (4) Overseas Trained Teacher Programme: Teachers who are qualified as a teacher overseas, and outside the European Economic Area (EEA), can be eligible to work in England as a temporary, unqualified teacher for up to four years while you achieve Qualified Teacher Status (QTS); (5) Registered Teacher Programme: student teachers can be employed by a school, earn a salary, complete your degree and work towards QTS all at the same time; (6) The Registered Teacher Programme (RTP): this programme provides a blend of work-based teacher training and academic study, allowing non-graduates with some experience of higher education to complete their degree and qualify as a teacher at the same time; (7) BA/BSc with QTS: in this programme, student teachers can study for a degree towards QTS and do initial teacher training at the same time; (8) Bachelor of Education (BEd):

teacher training most have already finished their three- or four-year university majors. In comparison, the second route in Taiwan has student teachers undertake teacher training before they have finished their university studies.

### **2.3.2 The setting of student teaching in school**

In this section, I explain the setting in which student teachers learn to teach after their university training. Student teachers do a six-month student teaching practice period in a primary school, mainly supervised by university tutors and school mentors, and most student teacher activities in this period take place on-site. Student teachers' teaching is observed by their mentors, who usually have informal discussions with them. However, it is also compulsory for student teachers to attend a workshop at their university once a month, during which they can discuss their school experience with their university tutors and their fellow student teachers. At the end of the teaching practice period, student teachers are assessed by their universities and schools to ensure that their teaching performance matches the requirements needed to be a qualified teacher. The types of assessment are varied, because higher education institutions devise their own,

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this course enables you to study for your degree and complete your initial teacher training at the same time. Course content may vary according to the university or college providing it, but all BEd graduates receive QTS in addition to their degree. It is a popular choice for those who are interested in teaching primary school children, but it is also an option for anyone wanting to teach secondary; (9) Assessment-based training: if student teachers already have a degree and substantial experience of working in a UK school as an instructor or unqualified teacher, or as a teacher in an independent school or further education institution, they are able to qualify with minimal teacher training. Assessment-based training offers student teachers the chance to demonstrate that they meet the standards required to achieve QTS by compiling and submitting a portfolio of evidence of your abilities as a classroom teacher. (10) Assessment Only (AO) route to QTS: the participants who are very experienced teachers with a degree and are considered to meet all of the standards for QTS can apply for a place on the Assessment Only (AO). The AO route allows student teachers to demonstrate that they already meet all the QTS standards, without the need for any further training. They will need to present detailed evidence, and your teaching will be assessed in a school by an accredited and approved provider (from <http://www.tda.gov.uk/get-into-teaching/teacher-training-options.aspx>)

based on those in the Regulations of the Practice of Teaching Practice (2006). I detail how student teachers' teaching performance is assessed below.

Higher education institutions in charge of teacher training are expected to select university tutors who have the ability and willingness to supervise the teaching practice of student teachers. University teachers designated as tutors should have at least two years' teaching experience in primary schools, and each tutor is assigned no more than eighteen student teachers. During the teaching practice period, they are expected to visit student teachers on-site regularly, to arrange seminars and workshops at least once a month, and to provide teaching-practice related publications which are mailed to each student teacher regularly. Telephone and internet access for student teaching counselling are also provided. In turn, higher education institutions are expected to reimburse tutors for time spent on these activities. Additionally tutors' own teaching hours are reduced by from one to up to three hours to release time for the supervision of student teachers.

Mentors are selected by the head-teachers of primary schools and a list of names is sent to higher educational institutions. Mentors are given no formal training, but they must have at least three years' school teaching experience and be able to show that they have the ability and are willing to instruct student teachers. Each mentor is assigned to one student teacher.

Following the step-by-step principles described in the student teaching scheme, some schools gradually increase teaching hours for student teachers from four to twelve hours in the teaching practice period. In this period, student teachers are required to be

observed by their mentors, so that their mentors can discuss their teaching performance with them and give feedback. Also, student teachers have to teach at least once in front of their head-teacher and other school colleagues. If this is successful, it can encourage more student teachers to stay in teaching.

The teaching practice period involves not just teaching, but also makes a priority of handling pastoral responsibilities, and there is subsidiary guidance on school management. There are also workshops in schools, which student teachers attend with other teachers, and regular seminars and workshops in higher education institutions. Learning about school management usually takes place in the first month, when pupils are on vacation and student teachers are free from classroom teaching. This consists of learning about the range of offices or departments within the school. In the second month, student teachers are required to observe the teaching of their mentors and other experienced teachers, and to help their mentors deal with classroom routines. They may help their mentors review pupils' homework, help pupils deal with learning difficulties, prepare teaching materials, and manage classrooms activities. Student teachers are taught how to maintain classroom order, to monitor pupils' cleaning activities and properly deal with pastoral work, and what contingency plans should be in place to cope with emergencies. In the third month, student teachers undertake teaching. The teaching workload, in accordance with policy, cannot exceed 12 teaching hours per week. Mentors supervise the student teachers' teaching and meet with them for follow up discussions. In England, in comparison, student teachers begin teaching practice while they are still at university. For example, at the Institute of Education, University of London, student teachers have to spend 38 weeks in primary schools during a year of

teacher training, working alongside experienced teachers. Learning to teach is the main activity in the teaching practice period in primary schools.

As regards evaluation, in Taiwan each student teacher is evaluated by their higher education institution and by the school where they have practised. Reflecting the amount of time spent on each aspect, practical teaching accounts for 40% (including one teaching observation), pastoral work for 30%, school management for 20%, and workshop activities for 10%. Participation in seminars and workshops, teaching observation, reviews of teaching practice, and teaching practice learning profiles are all considered when the performance of a student teacher is assessed. The higher education institution and the school each contribute 50% to the overall grade, and the pass mark is 60%.

Compared with the pre-1997 probationary year programme, the arrangement of the teaching practice period may have improved somewhat, especially in terms of learning to teach. Mentors have been introduced to help student teachers adjust to a teaching career more smoothly, and to connect their university learning to teaching practice. Pre-1997, probationary teachers like me had to teach alone in a classroom and develop their personal teaching expertise almost by themselves. As such, we probationary teachers easily felt frustrated and depressed when we were struggling to keep classrooms under control and attempting to apply the teaching perspectives we had learnt at university.

In England, the evaluation of learning in teacher training is very different and quite standardised, as specified by descriptions of the Award of Qualified Teacher Status. For

example, in the teacher-training programme of the Institute of Education, student teachers have to show that they have a certain understanding of the key aspects of study, such as teaching and professional pedagogic practice, learning processes, the various contexts of learning and teaching, and the application of knowledge in teaching and other work to a range of learners and colleagues (see [http://www.ioe.ac.uk/study/teacherTraining/IPGP\\_PRI99F.html](http://www.ioe.ac.uk/study/teacherTraining/IPGP_PRI99F.html)). In addition, they have to show ability in five aspects of teaching:

1. analysing teaching and learning within immediate and wider professional contexts;
2. drawing from and applying appropriate intellectual perspectives to teaching and learning;
3. professional knowledge refined through critical reflection and engagement with research and scholarship and understanding;
4. an ability to analyse the values underpinning or influencing pedagogic approaches;
5. a personal ability to conduct professional learning.

Teacher-training schemes in primary education both in Taiwan and England imply a reflective teaching model and emphasise practical experience, but they are implemented in different ways. Similarly, student teachers in both schemes learn theories and knowledge in university, and apply these in the classroom by reflecting on theories and practice. However, student teachers in England usually enrol on the one-year Primary PGCE teacher-training course if they intend to be primary teachers. Student teachers on this course learn theories and knowledge about teaching alongside undertaking teaching practice. They are expected to spend more than half their time in classroom teaching practice and less time in universities. In the process of learning to teach, student teachers will be assessed several times by experienced teachers and

PGCE tutors, to identify whether their teaching performance matches the standards required by the teacher-training programme. This is not the case in Taiwan.

Also, the teacher-training scheme in England is more standardised than is the case in Taiwan. Student teachers in England have to demonstrate that their classroom performance matches national standards. This is not a common requirement in the Taiwanese teaching practice period, although this sort of standardised assessment exists in the schemes of some universities. To a large extent, the purpose of teacher-training schemes in England is to equip student teachers with expertise in teaching by achieving the competencies listed in the scheme, while in Taiwan there are no strict regulations to tell student teachers, mentors, and tutors what is required in order to be a qualified teacher. The assessment is based on the judgement of principals (head-teachers), mentors and tutors. Its purpose is mainly to help student teachers socialise into the school environment with the assistance of mentors and tutors and to reflect upon theories learnt at university.

## **2.4 Conclusion**

In this chapter, I summarised the teacher-training programme and the context in which Taiwanese primary student teachers learn to teach. A longstanding Chinese tradition means that teachers in Taiwan enjoy a high social status and a good salary. Before 1997, when I did my teaching practice, probationary teachers were isolated in classrooms and had very limited support. Since then, the setting of the probationary year has been replaced by the teaching practice period and student teachers now receive substantial support from their mentors when teaching. In addition, I also identified some of the key



differences between the Taiwanese and English programmes with regard to the context concerning primary teachers and their teacher-training programmes.

In the next chapter, I begin by exploring critically the main literature on the factors that influence their socialisation and reflection. I conclude with a theoretical model to explain the learning of student teachers during the teaching practice period.

## **Chapter 3**

### **Studies relating to student teaching**

In Chapter 2, I explained how the teaching practice period in Taiwan is designed with the aim of helping student teachers to become socialised into their teaching career, to undertake teaching practice based on reflecting on their university knowledge and, then, to improve their teaching expertise; in other words, to come eventually to behave like a teacher. In this chapter, I review studies relating to socialisation, reflective teaching, and teacher development. At the end of this chapter, drawing on my reflections on the literature, I suggest a model to explain how student teachers learn to teach during the teaching practice period.

This literature review is connected with two research questions I am planning to address. The two questions are:

1. What factors enhance or hinder the professional learning of Taiwanese student teachers during the teaching practice?
2. How do these factors influence their development as beginning teachers and their broader learning experience?

These two research questions explore the factors that affect the professional learning of student teachers and how student teachers develop their teaching expertise, influenced by these factors, during the teaching practice period. The research questions are chosen because I have surveyed a large body of literature, but little is directly relevant to the learning experience of student teachers in Taiwan. Therefore, the studies examined here were chosen because they are relevant to my focus, regardless of the age of the sources.

in sections 3.1–3.3 I investigate literature about learning during the teaching practice period from three perspectives: socialisation, reflection, and professional development. From the socialisation perspective, I use a sociological approach to investigate what the literature says about the way in which teachers are socialised into a school environment and the tactics they employ in order to survive. In terms of the reflective approach, the studies of Dewey and Schön are discussed and relevant studies are reviewed in order to gain an understanding of how teachers reflect on teaching practice. The developmental approach outlines the sequential stages through which teachers develop their teaching expertise. Then, I look critically at the literature which characterises teaching practice as a process of developmental stages. In the section 3.4, I will explore the knowledge about how student teachers learn in the teaching practice period. And, finally, based on the review of this literature, I will build a model to demonstrate how student teachers learn to teach in teaching practice period.

### **3.1 Teacher socialisations**

The development of teaching expertise by student teachers can be considered to be a process of socialisation. In the *Encyclopaedia Britannica* (2010: online), socialisation is '*the process whereby an individual learns to adjust to a group (or society) and behave in a manner approved by the group (or society)*'. It has '*a central influence on the behaviour, beliefs, and actions of adults as well as of children*', and furthermore, it provides the individual with the skills and habits necessary for participating within their own society; a society itself is formed through a plurality of shared norms, customs, values, traditions, social roles, symbols and languages.

Thus, we can see that student teachers adjust themselves to school culture by socialising during the teaching practice period, which provides them with opportunities to learn how to think and behave like other teachers and improve their teaching ability (Atkinson and Delamont, 1985; Zeichner and Gore, 1990)

### **3.1.1 Sociological theories related to teacher socialisation**

I begin this exploration of teacher socialisation with a functionalist approach to socialisation, which suggests that values and norms exist objectively and outside the world of the individual human being. Durkheim's work concerns the study of 'social facts', a term he coined to describe phenomena that have an existence in and of themselves (Allan and Allan, 2005). The social fact, according to Durkheim, is

*every way of acting, fixed or not, capable of exercising on the individual an external constraint; or again, every way of acting which is general throughout a given society, while at the same time existing in its own right independent of its individual manifestations. (1960: 13)*

Social facts are endowed with a power of coercion, by reason of which they may control individual behaviours (Martin and Macintyre, 1994), and they can be either material (physical objects) or immaterial (norms, values, meanings, and sentiments). Physical objects can represent both material and immaterial social facts; immaterial things cannot be seen or touched, but they are external and coercive (Allan and Allan, 2005). These values and norms are created by people in a group or society, and they influence the thoughts and interactions of people. In order to maintain a peaceful society, people have to learn to behave well and adopt the knowledge of their group's or society's

collective culture, which binds them together like invisible cement. As Durkheim explains:

*When I fulfil my obligations as brother, husband or citizen, I perform duties, which are defined, externally to myself and my acts, in law and custom. Even if they conform to my own sentiments, and I feel their reality subjectively, such reality is still objective, for I did not create them; I merely inherited them through my education. (1960: 1)*

However, this approach only partly reveals how the self-teaching of student teachers forms in teaching practice. As already noted, the functionalist approach to sociology indicates that people must unconditionally learn and accept the norms and values of their society or group. Any deviation from the regulations is considered to be immoral and unacceptable. This implies that, during the teaching practice period, student teachers learn only the norms or values that a particular school associates with being a teacher.

A functionalist approach regards people as passively following pre-existing norms and values, and cannot take account of the impact of interaction in classrooms and schools. Symbolic interactionism, in contrast, identifies people as self-conscious individuals who can choose actions for their own purposes. People can therefore more actively respond to the rules of the societies, groups, and other individuals that they encounter. People exchange their views. Thus their interpretations of each other and the meanings of the roles they play are re-formed and re-created. Over seventy years ago, Mead (1934) explored the development of personal identity in the social context by looking at learning and socialisation. He argued that ‘*significant others*’ have a greater impact on the formation of personality in childhood, whilst ‘*generalised others*’ have an impact on

the understanding of how adult roles are played out in society. He considered these roles to be flexible, because people usually reinterpret their meaning in relation to each other. The meaning of the self is therefore changeable and is re-shaped through interaction:

*The individual is continually adjusting himself in advance to the situation to which he belongs, and reacting back upon it. The self is not something that exists first and then enters into a relationship with others, but is, so to speak, an eddy in the social current and so is still a part of the current. (Mead, 1934: 182)*

The teaching expertise of student teachers is mainly developed through interactions with mentors and pupils in the teaching practice period. Although Mead's theory is rather dated it can still provide insights into the learning of student teachers during teaching practice. The beliefs and behaviour of student teachers change when they are struggling to learn how to teach: they imitate the skills or behaviour of their mentors, or attempt to respond to how mentors or pupils react through speech or body language to their teaching. During this process, a change may occur in teaching beliefs. Mead's approach is useful when attempting to identify when this occurs, which as shown in the research questions is one of the main purposes of the current study. However, as I explain below, his theory does not give provide a full understanding of the process by which student teachers learn to teach.

Another sociological perspective, which can be connected to the two approaches already discussed, is provided by Bourdieu. He takes a critical approach, and he regards most of the rules or norms that dominate interactions between people as a form of violent power. Applying this perspective to education, the values and regulations of institutions such as schools can be regarded as a legitimate form of power which is

imposed on those who are associated with them. The word he often uses to demonstrate his theories, and which can be applied to teacher training, is 'habitus'. In Bourdieu's definition, 'habitus' refers to conceptual thinking

*which one has acquired, but which has become durably incorporated in the body in the form of permanent dispositions... [I]t refers to something historical, linked to individual history, and ... a genetic mode of thought, as opposed to essentialist modes of thought. (1993: 86)*

Bourdieu describes 'habitus' as difficult to discern, but as existing in certain groups, communities, and professions. Also, 'habitus' can be reproduced from generation to generation.

Similar to this, Lave and Wenger (1991) have developed the concept of 'community practice', emphasising that social practice in a community is significantly influenced by culture and identity. Interactions between people in a community bind them and form a particular pattern of perspectives and behaviour, and this can have significant application to the process of learning to teach and should be properly explored (Pollard, 1982). The strategies that student teachers employ to cope with difficulties may be derived from personal experience: for example, those whose parents are teachers might inherit a disposition towards the same career. I would like to argue that studies of teacher training might focus more on exploring the 'habitus' of teaching: teachers have formed a community, which has its own culture. If we want to help prospective teachers become successful teachers, equipping them with adequate knowledge about the culture or dispositions of this career may help them to engage more effectively (Atkinson and Delamont, 1985).

The theories of Durkheim and Mead show that culture plays an essential role in interaction between people. However, and crucially, they do not consider the possibility that the process of interaction might also involve a transformation of culture. From a Bourdieuan perspective, I can see how the dispositions of student teachers may play an important role in professional learning and should be investigated closely. In addition, Bourdieu observes that it is very difficult to escape the influence of dispositions on the process of learning. However, I would argue that his viewpoint is rather pessimistic and that student teachers, with reflective practice, can become good teachers, the teachers they know *they can* become.

### **3.1.2 Studies related to the socialisation of student teachers**

Durkheim emphasises that people observe the norms or customs of society or groups, while Mead argues that people learn customs through interactions. Applying these two perspectives to the socialisation of teachers, we can judge that it is highly probable that the teaching beliefs of student teachers change during teaching practice as a result of their interactions with people and institutions, as they attempt to adjust their original beliefs to the school context. Having investigated how probationary teachers in England adjust to the environment they first encounter, Lacey (1977) observed that, in terms of teaching concepts, three strategies are employed when conflicts occur between student teachers and their instructors. The first is '*strategic compliance*', in which '*the individual complies with the authority figure's definitions of the situation and the constraints of the situations but retains private reservations about them*' (1977: 72). Probationary teachers may not agree with or be convinced by what their mentors suggest, but despite their concerns they pretend to agree with them and follow their



mentors' instructions. The second strategy is '*internalised adjustment*', in which '*the individual complies with the constraints and believes that the constraints of the situation are for the best*' (1977: 72). Those who employ an '*internalised adjustment*' will adjust themselves to the opinions of their instructors, with a view to getting on with their instructors. The third strategy employed when encountering problems is '*strategic redefinition*', through which student teachers attempt to influence or change their instructors and persuade them to accept their views:

*A strategic redefinition of the situation implies that change is brought about by individuals who do not possess the formal power to do so. They achieve change by causing or enabling those with formal power to change to change their interpretation of what happening in the situation. (73)*

While teaching concepts change after the one-year probationary period, the nature of the change depends on the student teacher's initial teaching beliefs. For example, those with a child-centred, or radical, attitude tend to blame their problems on how the responsibilities of the system relate to them as the teacher, and they handle these problems by improving the pupil-teacher relationship. On the other hand, those with a subject-centred, or traditional, attitude regard problems as emanating from the pupils themselves, to be resolved by strict discipline and by making pupils understand how to behave properly.

This analysis of the strategic approaches of first-year teachers is supported by a study by Zeichner and Tabachnick (1983), in which three out of four new teachers attempted to redefine the range, in their opinion, of desirable behaviour in their schools, while the fourth chose to internalise, or adapt to, the school's dominant norms in terms of both values and behaviour. Even under strong pressure from their colleagues and

head-teacher, two of the three who attempted to make changes were successful in their 'strategic redefinition', with support from parents and pupils, while the third failed due to a lack of support from colleagues, the disruptive responses of pupils, and her own feelings of rejection and despair.

Regarding the tactics used by first-year teachers to accommodate themselves to the school environment, Kelchtermans and Ballet (2002) used a similar research approach to explore the socialisation of new teachers and the strategies they employed to cope with the difficulties they encountered in teaching. Fourteen new teachers were asked to reflect on their teaching experience as first-year teachers, and they were found to have employed strategies of self-affirmation by spending more time preparing teaching materials. In addition, they attempted to acquire the recognition of other teachers, pupils, and parents by adapting to the culture of the school. The study's authors also note that rules, positions, and tasks have an impact on the behaviour of new teachers. Some first-year teachers attempt to secure permanent teaching posts in schools by demonstrating their teaching expertise to important individuals in their school, such as the head-teacher, by avoiding doing anything which may cause trouble in area of school management, or by adapting to the culture of the school environment, even though it may contradict their personal perspective.

Lacey's study (1977) discussed above shows that student teachers actively respond to the impact of the environment they find themselves in by developing social strategies to cope with the various situations they encounter. They resort to referring to their past experience when considering their present environment, and formulate various strategies. For example, when teaching beliefs conflict with those of tutors or mentors,

student teachers can choose either to internalise their mentors' or tutors' ideas, to refuse to accept them, or to adjust to them and make slight changes while maintaining their original beliefs. Kelchtermans and Ballet (2002) also identify the strategies new teachers use when they encounter a new environment, and they suggest that they are motivated by self-interest. For example, student teachers may attempt to acquire a teaching post by impressing the important individuals in the school, or improve their teaching expertise simply for self-fulfilment during the teaching practice period.

A student teacher's way of surviving and of learning skills and approaches can to some extent be considered to be a kind of reflection taking place during the training process, whether consciously or unconsciously. In my view, this is a 'tactical stage', during which student teachers, while teaching, learn teaching skills and approaches and develop immediate ways to cope with difficult situations by reflecting on their personal experience. At the same time, their beliefs about teaching begin to change. For example, when applying teaching skills, student teachers may sense that the dispositions of pupils will affect their learning outcomes. They then think about learners' beliefs about learning and start to consider the needs of pupils in their future lesson plans. Student teachers make these efforts to accommodate themselves adequately and effectively to their teaching. In other words, reflection by student teachers at this stage is for the purpose of teacher socialisation. The student teachers are still essentially positioning themselves in learning how to behave like other teachers they observe and talk with. I am interested as to whether reflection can take student teachers further in their professional learning or how and whether they just stop at this point. In addressing this issue, it is necessary to review studies relating to the reflective practice of student teachers.

### **3.2 Reflective practice in teaching: developing a personal teaching style**

Engaging in reflective practice about teaching has been shown to be supportive of the development and maintenance of teachers' professional expertise (Pollard, 2005). When reflecting, teachers modify and review their previous teaching practice, so that their teaching may improve in the next teaching practice session. In this section, I acknowledge Dewey and Schön as two key influential thinkers on reflective thinking, although in the context of the current study I also have some criticisms. Dewey is the iconic, original scholar of '*reflective thinking*', which denotes the process of how people resolve the problems they face through reflection. However, Schön, investigating professional learning, notes that the process of problem-solving most often does not follow the way that Dewey perceived. Rather, he stresses that when individuals are forced to resolve numerous problems at the same time, they tend to make judgements based on personal experience. Since the studies of these two authors have been prevalently applied in teaching practice and continue to influence the studies of others (see Pollard, 2005), this section investigates Dewey's and Schön's observations on reflective practice and the extent of their on-going application to teaching practice.

#### **3.2.1 Significant literature on reflective practice**

John Dewey's (1859–1952) ideas have greatly influenced education around the world. He was one of the founders of the philosophical school of Pragmatism and an iconic figure in the progressive schooling movement in the USA during the first half of the

twentieth century. Dewey's work begins by comparing routine action with reflective action. He claims that people live most of their lives in a thoughtless way, based on tradition, instruction, and imitation:

*Such thoughts are prejudices, that is, pre-judgements, not judgements proper that rest upon a survey of evidence. (Dewey, 1933: 4–5)*

Reflective action, in contrast, involves

*the active, persistent and careful considerations of any belief or supposed form of knowledge in the light of the grounds that support it (6)*

The motive for reflective thinking is to resolve problems:

*Demand for the solution of a perplexity is the steadying and guiding factor in the entire process of reflection. Where there is no question of a problem to be solved or a difficulty to be surmounted, the course of suggestions flows on at random. (14)*

Thoughts are integrated and targeted toward to a goal by means of disciplined and systematic thinking, and Dewey's study identifies the characteristics of this process and its practitioners. He identifies five phases of reflective thinking, although this is not to be seen as a strict sequence. Reflective thinking begins with the interpretation of a situation, and in this phase individuals use observation to identify the situations in which they are involved and to acquire an understanding of their environment. They may then identify difficulties which cannot be dealt with in the normal way and, after encountering them, they begin to formulate various ways, or form various hypotheses, about how to resolve them. The best way will be discovered by reasoning, elaboration,

and examination over a period of time, on the basis of personal disposition and a prior understanding of the environment. The next stage is to put imaginative actions into practice and to test whether or not they can successfully resolve the problem.

Dewey identifies three characteristics of reflective practitioners: '*open-mindedness*', '*responsibility*', and '*whole-heartedness*'. '*Open-mindedness*' means that reflective practitioners should listen carefully to the opinions of others rather than simply follow tradition or a personal routine. '*Responsibility*' means that because reflective practitioners will be held responsible for the outcomes of their practice, they should thoroughly consider the outcome before taking any action which may affect other people or the environment. '*Whole-heartedness*' means that reflective practitioners should also examine their own perspectives and modify them if necessary. It should be noted this process consists of merely examining perspectives, rather than consciously adopting new beliefs.

Dewey's '*reflective teaching*' is relevant to explaining how teachers encounter and resolve problems, and this approach can be applied to the learning of student teachers during teaching practice. Student teachers are placed in a classroom and are required to teach. They try to understand the classroom situation and teaching content, and then devise their teaching plans. These plans may be effectively or ineffectively implemented during the teaching process, and examined after the completion of the teaching practice session(s).

However, Dewey's ideas of 'reflection' are too idealistic and may be too abstract for student teachers in the immediacy and pressure of their first experiences of teaching.

For those beginning teaching, his systematic and disciplined thinking is too strict and rigidly linear to apply. First, classroom situations are complicated, pressurised, and frequently demand instant responses. Thus, student teachers cannot always think systematically, and most of the time they resort to their personal experience and make judgements immediately. Schön (1983) senses this point, and I examine how he develops his perspectives on reflection in the following paragraphs. Second, because of their limited experience, it is rare for student teachers or beginning teachers to have the capacity to reflect meaningfully on their teaching. In most situations, in my experience, they tend to ask for suggestions from other people, or consult academic books or teaching manuals relating to their practice. Reflection may happen, but it is based on personal experience and is tactical rather than systematic and focuses on how to resolve difficulties or situations instantly. Third, systematic and disciplined thinking and Dewey's three characteristics of reflective practitioners may emerge when beginners have passed through the 'survival period' and are more confident in their expertise. At this point, they are willing to open their minds and listen to other opinions, and have the ability to think strategically and to consider their future practice in disciplined and systematic ways. For example, beginning teachers have already accumulated considerable experience, which becomes the material they can reflect upon.

Donald Alan Schön (1930–1997) was an influential thinker who in the late twentieth century developed the theory and practice of reflective professional learning, extending Dewey's ideas on reflection. He was trained as a philosopher, but his main concern, for which he is best remembered, was the development of reflective practice and learning systems within organisations and communities. His most influential work relates to reflection in practice and the concept of 'learning systems'.

Schön (1983) particularly emphasises the crucial role of the practical aspect of professional knowledge. He identifies three different forms of reflection in his Theory of Reflective Thinking: '*knowing-in-action*', '*reflection-in-action*', and '*reflection-on-action*'. '*Knowing-in-action*' refers to the fact that knowledge is associated with action, but that it is difficult for individuals to clarify the nature of the knowledge informing the action. For example, someone who can ride a bicycle may not be able to describe clearly the skills possessed for doing so. Professional practitioners may be equipped with many research-based theories and techniques, but it is tacit knowledge which helps them to perform. Thus, although competent teachers may employ certain teaching activities to help students with learning difficulties, they may not be able to explain the reason for choosing particular activities.

'*Reflection-in-action*' is employed when practitioners feel uncertain that '*knowing-in-action*' is applicable to a situation. They reflect upon and modify their previous understanding of their actions, and then implement their new understanding in subsequent actions. In terms of teaching practice, teachers may find that the method they usually adopt for motivating pupils to learn has failed. Therefore, they may refer back to the knowledge and techniques they possess and choose a suitable course of action which they judge will resolve the problem. Solving problems in this way is experimental, but Schön indicates three types of 'on-the-spot' experiments for '*reflection-in-action*': exploratory, move-testing experiments, and hypothesis-testing.

The exploratory method of *reflection-in-action* refers to performing an action without a particular objective, in order to see the results. Move-testing experiments refer to



applying an action to a situation to see whether or not the expected consequence occurs: an action which is shown to have a successful outcome is regarded as confirmed and accepted, while one that does not is discarded and practitioners devise a new experiment. Another way practitioners may implement a theory is through hypothesis-testing, in which they test several possible ways that might lead to a desired result. A hypothesis will be cautiously confirmed if it can produce satisfactory results.

This kind of reflection has sociological implications. A change in a practitioner's beliefs becomes possible when there is interaction in certain contexts between him/her and other individuals. The interaction helps practitioners to reflect on their own beliefs, which are influenced by several factors: these include personal disposition, the particular persons with whom they interact, the subject content they are responsible for teaching, and the school environment. They then make judgements which they act upon, and the new experience then leads to further feedback and further 'reflection-in-action'. Judgements are made through interactions with other people and the environment. Practitioners may choose to internalise the norms that the context informs them of, or reject these norms and attempt to make changes. This is largely a tactical phase.

Schön notes that '*reflection-on-action*' also involves frequently implementing experiments. '*Reflection-on-action*' occurs when practitioners reflect upon what they have done. However, while they have to use language to describe the situation they have experienced, the situation may have involved the domain of tacit knowledge, i.e. '*knowledge-in-action*' or '*reflection-in-action*'. This may therefore be difficult to put into words, even for professionals, and the attempt may result in distortion. However, this process can be used by professionals to enhance their development.

*'Reflection-on-action'* is similar to Dewey's concept of reflection. It refers to the reflection which occurs after a practice period, and provides another way of understanding how teachers reflect during the teaching process. I believe that the meaning of this concept can be enriched by considering its sociological implications. At the earlier stage of socialisation, *'reflection-on-action'* is mainly focused on how practitioners can improve the implementation of skills or knowledge they have been informed of or learnt. When practitioners are confident about the application of skills, this reflection turns to broader considerations: for example, whether pupils can benefit in the long term from a particular teaching skill, or whether it is suitable for pupils from particular backgrounds. Student teachers at the beginning of their teaching practice tend to reflect tactically; after becoming familiar with a range of tactical options, as in *'reflection-on action'*. They then have the opportunities and capacity to reflect strategically.

Both *'reflection-in-action'* and *'reflection-on-action'* are influenced by personal experience. However, an improvement in reflection hints at the possibilities for escaping from the clutches of previous experience. This to some extent contradicts Bourdieu's pessimistic viewpoint, in which he regards earlier experience, or *'habitus'*, as deeply rooted and difficult to change even with professional learning.

### **3.2.2 Studies on reflective practice in teaching**

The previous section made a connection between socialisation and reflection. I argued there that both take place during teaching practice as a way to enrich the experience of

learning how to teach. To further understand the significance of reflection during teaching practice, I here examine the literature on reflective practice in education. I categorise this literature according to four aspects of reflective teaching in practice:

1. dimensions of reflective practice
2. the process of reflective practice
3. the development of reflective practice, and
4. the contextual factors which influence reflective practice.

Applying the studies of Dewey and Schön to teaching practice, Zeichner and Liston (1996) identify five dimensions of student teachers' reflective practice: *rapid reflection*, *repair*, *review*, *research*, and *re-theorising*. '*Rapid reflection*' refers to the immediate and automatic *reflection-in-action*, or *knowing-in-action*; '*repair*' occurs when teachers look for quick solutions to the situations they encounter using their personal experience or knowledge; '*review*' is reflection after having completed teaching practice; '*research*' refers to systematic reflection on the particular issues of teaching over a period of time; and '*re-theorising*' refers to long-term *reflection-on-action*, drawing on academic theories. This shows that reflective practice starts from reflection on personal experience, then moves on to teaching skills and knowledge, and finally on to theories. Zeichner and Liston note that the first two dimensions are commonly seen during teaching practice; this implies that, in general, student teachers' reflection remains tactical (behaving like other teachers), and not strategic (behaving like the teacher they want to be). However, I would add that context may influence the reflective practice of student teachers. For example, in countries where teachers have a high social status and are greatly respected, pupils are more obedient. This can help student teachers, with the assistance of mentors, to gain confidence in teaching practice quickly and start to reflect on the relevance and application of their university learning.

The development of reflective practice is further explored by Husu *et al.* (2008), who identify seven types of reflective activity in student teaching: *habituation*, *introspection*, *association*, *integration*, *validation*, *appropriation*, and *transformation*. ‘*Habituation*’ by its very definition, cannot be identified with reflection. It refers to ‘*a nearly automatic performance by the student teachers with little conscious thought*’ (44), which is similar to Schön’s ‘*knowing-in-action*’. ‘*Introspection*’ is a personal judgement on teaching performance, which may be emotional and intuitive, and derived from personal experience, including a small amount of professional experience of teaching. In terms of ‘*association*’, the authors indicate that this kind of reflection occurs when student teachers undertake reflection based on limited teaching experience; for example, as personal tutors or substitute teachers.

The first three types of reflection focus mainly on personal experience. In the following types of reflection, new knowledge, which student teachers may have learnt at university or from the suggestions of experienced teachers, starts to influence the reflective practice of student teachers. ‘*Integrated*’ reflection by student teachers is based on practical experience in teaching practice, and on knowledge acquired at university. ‘*Validated*’ reflection is demonstrated when new and old teaching skills or ideas are tested in teaching practice, while ‘*appropriated*’ reflection occurs when certain classroom events have a significant influence on the professional knowledge of student teachers. The impact of these events gives student teachers greater professional understanding and insight into teaching practice. The final type of reflection, ‘*transformation*’, refers to reflection which has a crucial impact on the professional development of student teachers.

Husu *et al.* investigate how the reflection of eight student teachers relates to these seven categories. Their findings are that the reflective practice of student teachers usually stops after the first three types of reflection, which are based on personal experience, and that further categories of reflection occur only sporadically. This emphasis on personal experience is due to student teachers being at the earliest stages of teacher socialisation and lacking teaching experience. Reflection on new knowledge, in Hsu *et al.*'s study, appears frequently in the reflection of only two or three student teachers. This implies that reflective practice may be influenced by personal dispositions and contextual factors, but the authors fail to investigate how these relate to reflective practice. However, I would argue that, because the study is based on research derived from Scandinavia, it may be culture-specific and that a study undertaken in an area strongly affected by traditional Chinese culture may give different results.

Writing extensively about reflective teaching over the last fifteen years, Pollard (2002) has established an approach to reflective teaching in which he has developed a particular concept of reflective practice. Teachers should reflect on the results of their teaching and compare them with their targets, and use this information to modify their teaching methods. The attitude teachers should have toward reflective teaching is also discussed, and described as a cyclical process. From the beginning, teachers should have plans for teaching, prepare materials, and develop strategies. When in the classroom, they should adhere to their prepared material and collect data about pupils' motivations and behaviour. After teaching, teachers should revise their teaching plan based on the collected data, and adopt a modified teaching cycle.

This circle of reflective practice correctly shows how teachers do their reflective thinking. However, Pollard's perspective cannot properly interpret the reflective thinking of student teachers, because he fails to consider reflective teaching in both reflective and developmental ways. If he were to do so, the circle of reflective thinking would be transformed into a spiral, implying that an improvement of teaching expertise occurs when teachers undertake reflective practice continuously. This in turn implies that reflection is incremental and multi-dimensional and not simply cyclical, albeit, much like other forms of learning, occasionally random (Abbott, 1994).

Another study concerned with the process of reflective teaching was conducted by McDuffie (2004), whose research is largely informed by Schön. She explored reflective thinking in the teaching practice of two mathematics student teachers as they initially formulated their teaching plan and applied it to their teaching. Two types of '*reflection-in-action*' were identified: immediate reflection and delayed reflection. Immediate reflection is the action which student teachers make at once to cope with classroom situations, while delayed reflection is the reflection student teachers make after a short period of classroom practice. Two kinds of '*reflection-on-action*' are also discerned: short-term and long-term. Short-term reflection happens after the end of a teaching practice session, while long-term reflection happens when teaching experience is systematically analysed after several teaching practice sessions.

McDuffie uses Schön's study to interpret the reflective practice process in relation to teaching. However, her model is not an adequate representation. She fails to consider the development of reflective practice, and how and why this occurs at an individual level. It should be noted that long-term reflection may not happen at the beginning of

teaching, as teachers at this stage have not yet accumulated enough teaching experience. This kind of reflection may be employed when teachers are confident in their teaching expertise.

Having reviewed Pollard and McDuffie, I consider that including a developmental perspective can make process models more applicable to understanding how student teachers learn to teach, and thus give guidance for how to provide adequate support. From this perspective, the following paragraphs review four studies concerned with the development of reflective practice. Two of these studies are concerned specifically with teaching.

Zeichner and Liston (1996) discuss the areas of content on which teachers reflect:

1. teaching content;
2. the learning in the teacher-training course;
3. the disposition of learners;
4. the impacts of social conditions on teaching practice;
5. teaching materials in general.

With a view to identifying the ways in which student teachers develop reflective thinking in teaching practice, McIntyre (1993) identifies three different levels of theorising and reflecting:

1. the technical level;
2. the practical level;
3. the emancipatory level.

On the technical level, reflection focuses on how student teachers learn to apply certain teaching skills and attain given goals such as maintaining classroom order, planning purposeful activities, and gaining pupils' attention, etc. On the practical level, teachers begin to evaluate their teaching performance by collecting and interpreting evidence from the classroom, and by exploring different ways of teaching. This suggests that student teachers develop habits of reflection and begin to create their own teaching styles. On the emancipatory level, teachers come to understand the ideologies of certain institutions and of society, and make their own judgements about teaching in relation to them. McIntyre sees student teachers' reflection as being mainly at the first two, technical and practical, levels. The current study similarly observes that, at the beginning of teaching, teachers' main concerns are the application of teaching skills and their teaching performance. I argue that the situation of teachers at this practical level should be further investigated, since between the practical level and the emancipatory level teachers have first to form their personal perspective about teaching, and then weigh up what to teach and how. That, I suggest, has to happen through reflection.

In the same vein, When they first begin to teach, student teachers identify the environment they encounter, and this becomes the object of their reflection. This is the descriptive dimension. Then, when student teachers begin to consider alternative approaches to teaching and make judgements, they arrive at the second, comparative, dimension. Finally, student teachers develop their own perspectives on teaching and their reflection comes to have a critical dimension. Subsequently, the reflection may revert to descriptive reflection, and this forms a cycle of reflective practice. Similarly, Lee (2005) conducted a study to investigate the depth of reflective practice of three pre-service teachers in Korea. She identified three levels: recall, rationalisation, and



reflectivity. At the recall level, student teachers' reflection is based on personal experience, and is not informed by other elements. At the rationalisation level, student teachers consider and reflect on others' opinions, and form personal principles to deal with teaching situations. At the reflectivity level, student teachers undertake reflection in preparation for future teaching and interpret their experience from various perspectives. Unlike Jay and Johnson (2002), Lee does not emphasise a cycle of reflective practice.

These studies generally identify a trend of three phases of reflection. At the beginning of teaching, reflection focuses on personal experience and on becoming familiar with teaching skills; in the middle of their practice period, student teachers start to consider the adequacy of different skills or approaches in their teaching situations; finally, student teachers begin to develop personal principles in their teaching and reflect on various perspectives concerned with teaching. The first phase accords with perspectives on teacher socialisation. When student teachers encounter a situation with which they are unfamiliar from personal experience, they attempt to look for and learn new skills in order to survive or cope. In the two phases that follow, student teachers then move towards being more critical and reflective in teaching. They form personal judgements based on the various perspectives they encounter. This illustrates the possibilities that student teachers may start to reflect on theories when they feel they are successfully socialised into the school environment.

However, these studies simply look at the reflective dimensions of learning to teach, and although they show that the development of teaching expertise progresses to a stage of reflection, in which personal judgements concerning teaching are established, they

do not properly demonstrate how student teachers learn to teach. For example, if student teachers lack the motivation or capacity to behave or think like teachers, they cannot make judgements on others' perspectives when they find that their personal perspectives work badly in the situations they encounter. Nor will they try to gain experience in practice or seek teaching advice. When struggling to survive at the beginning of teaching, student teachers will choose to follow the suggestions of their mentors or other senior colleagues on how to present themselves in class. The studies reviewed here neglect this developmental process, because they focus only on what reflective practice is.

My model demonstrates how student teachers learn to teach during the teaching practice period, by referring to the impact of socialisation and reflection on professional learning. I have identified that student teachers' reflection alone does not have a significant impact on the development of teaching expertise, but that the process of socialisation, involving internalisation and adaption, plays an equally important role in professional learning during the teaching practice period. Thus, I consider that the process of socialisation should be regarded as a crucial aspect of a student teacher's learning to teach. In addition, the stages of professional learning should be considered so that the model can better explain the experience of student teachers in the teaching practice period.

Finally, some of the studies note contextual factors which affect reflective teaching. For example, Pollard (2002) indicates that learning with colleagues enhances reflective teaching, professional learning, and personal fulfilment. Teachers can clarify their teaching methods through contact with colleagues, and they can share their teaching

experiences and discuss teaching issues with each other. This also helps teachers to become accustomed to the school culture, and to develop a learning community within their schools. Zeichner and Liston (1996) identify three personal characteristics which they claim have an impact on reflective practice: personal experience, transmitted knowledge, and values. Pedre (2005) has explored the meaning of student teachers' reflective thinking, and found that student teachers learn reflective teaching while they are employed in practice, by reflecting on themselves and on (to use Mead's term) 'significant others'. Student teachers undertake different kinds of reflection based on their context. For example, during teaching practice they usually reflect on themselves, but when they are with their colleagues, they reflect while conversing. Student teachers undertake written reflection when they are required to write a reflective journal. Furthermore, Lee (2005) explores the factors which influence reflective teaching, identifying the following:

1. personal background;
2. mode of communication;
3. content of the reflection;
4. protocol of dialogue and questions;
5. mentors' ways of supervision;
6. student teaching experience conditions;
7. teaching context.

Personal characteristics, the school environment, and the teaching practice period setting are the three factors identified in these studies. However, they ignore one important factor: culture. This has a crucial influence on the interactions and personal characteristics of student teachers. In regions more strongly influenced by traditional Chinese culture, as discussed earlier, teachers find it easy to gain confidence in their teaching, since pupils are invariably obedient. This means that classroom discipline, the

issue which student teachers are most concerned about, is not a serious problem. However, Chinese culture may also have a negative effect. For example, student teachers may lack motivation to improve their teaching expertise or to reflect on alternative teaching approaches. At this time, mentors should encourage student teachers to reassess their university learning.

In this section, I have used sociological and developmental perspectives to reflect on studies of early-service teachers' reflective practice. I have also examined the writings of Dewey and Schön and studies relating to reflective practice in teaching; Dewey discusses the process and attitude of reflection, and explains how people are motivated to reflect, while Schön further develops Dewey's perspectives and explores the ways in which reflection is practiced by using the terms '*knowing-in-action*', '*reflection-in-action*', and '*reflection-on-action*'. Their theories can be applied to student teachers by categorising reflective practice into four elements: these are the dimensions of reflective practice, the process of reflective practice, the content and development of reflective practice, and the contextual factors of reflective practice.

However, I have argued that these studies concerning reflective practice fail to consider the role of socialisation or of influences that affect the motivation of student teachers to behave like teachers. Thus, these studies do not precisely demonstrate how student teachers learn to teach during their teaching practice period. Student teachers reflect when they desire to adapt themselves to a teaching career and believe that testing other teaching approaches or skills in the classroom will help them to improve their teaching performance. Thus, they observe the teaching of mentors and other senior colleagues in schools and incorporate these into their teaching. When they become confident in their

teaching and familiar with the application of these skills or approaches, they then examine their university learning and use their own judgement to consider how to teach properly. At that moment, they behave like the teachers they know they can become. In the earlier period of learning to teach, it is behaviour which guides teaching beliefs, while in the later period this gradually changes into a dynamic in which teaching beliefs guide behaviour.

The review of these studies also suggests that reflective practice takes teachers further towards the stage at which they start to reassess their knowledge and various theories and to form their personal principle of teaching. I identify this as a 'strategic stage'. In addition, reflective practice impacts on the beliefs of student teachers; for example, in terms of beliefs about learning to teach, student teachers may start to consider their university learning, rather than simply resort to their personal experience. In the next section I will review how teachers develop their teaching expertise at the beginning of their teaching practice period, and sociological and developmental perspectives will be applied to give a deeper analysis of reflective practice and teacher socialisation. Therefore, in the next section studies relating to developmental perspectives are examined, providing further insights into the complex process of learning to teach.

### **3.3 Professional development of new teachers**

Having examined the literature relating to socialisation and reflective teaching, it is clear that the learning of student teachers can be seen to have a developmental pattern. Socialisation literature shows that first-year teachers teach according to their personal experience. As they interact with pupils, mentors, and other related figures, they

develop different strategies to deal with them (Lacey, 1975; Zeichner and Tabachnick, 1983; Kelchtermans and Ballet, 2002). Subsequently, this socialisation process leads to a change in the beliefs of first-year teachers (Lacey, 1975). Similarly, the literature on student teachers' reflective practice reveals that student teachers begin their reflection with personal experience, and then consider and apply alternative approaches or skills and develop their own judgements when teaching. The current section will examine this developmental process throughout the period of teaching practice.

During teaching, new teachers focus on different aspects of classroom practice. Fuller and Bown (1975) identify four dominant concerns which occur sequentially in the process of becoming a teacher. In the phase of '*pre-teaching concerns*', student teachers never teach, and they judge pupils based on their own learning experiences from childhood. They have an unrealistic perspective about pupils and may consider their learning at university to be 'irrelevant' to classroom practice. The next phase is '*early concerns about survival*', which occurs when new teachers come into contact with actual teaching in the classroom. In this phase, the main concerns of student teachers are class control, the lesson-content, and how their supervisors evaluate their methods and results. Student teachers find their limitations in the third phase, '*teaching situation concern*', during which new teachers discover the various demands of teaching and begin to review the methods and materials they learnt during their training course. The fourth phase of concern is '*concern about pupils*'. In this phase student teachers pay more attention to individual pupils, becoming concerned with their learning, emotional, and social needs.

Fuller and Bown note the worries of beginning teachers in these different phases. This also reflects the fact that the learning of beginning teachers changes focus during the period in which they learn to teach, from classroom discipline, to teaching materials, and to the needs of pupils. Nonetheless, it seems to me that the process which Fuller and Bown have explored does not give a complete account of the development of teacher learning and how it takes place. Development does not stop at the tactical stage, in which the tactical skills are developed; rather, it goes on to a strategic stage, to reflection on related theories, or professional development of personal principles related to teaching.

Similarly, in his study of the professional development of probationary teachers, Lacey (1977) indicates four stages of development. In the '*honeymoon*' period, student teachers still view schools and pupils from their own perspective. In the phase of '*research for material and ways of teaching*', they begin their teaching and realise their lack of experience. This forces them to study more, as regards their use of teaching content and elaborate teaching materials. In the '*crisis*' phase, their sense of disappointment in their lack of classroom management and their failure effectively to teach their pupils grows. Some student teachers give up teaching at this stage due to an overwhelming sense of frustration with the profession. During the phase of '*learning to get by*', student teachers attempt to resolve their problems by resorting to peers, school teachers, or teachers in higher education for help.

Nearly twenty years after these two studies, Furlong and Maynard (1995) identified five stages of the professional development of student teachers. The first is the '*idealist stage*', during which student teachers tend to be approachable towards pupils and treat

them in a warm and friendly manner. Their teaching concepts are strongly influenced by significant teachers from their own schooldays, whether positively or negatively. Next, in the '*personal survival*' stage, student teachers feel powerless to deal with classroom practice and attempt to copy the teaching style of their mentors, especially in their interaction with pupils. They follow the plan and instructions of mentors strictly, and keep control in the classroom. The third stage is '*dealing with difficulties*', in which student teachers continue to replicate the behaviour of their mentors, hoping that they are behaving like real teachers. Teaching strategies and classroom organisation are their main concerns. '*Hitting a plateau*' is the fourth stage, during which student teachers feel confident in classroom management and teaching. However, their teaching concepts are still simple and naïve, and disregard the needs of pupils. The student teachers are confident about their teaching performance, and lack the motivation to improve their teaching expertise further. The final stage, '*moving on*', is reached when teachers' stabilised teaching concepts are challenged, and student teachers become willing to modify their teaching concepts and tailor their teaching to the needs of the pupils. I compare these three developmental models with my own (Yang) in the following diagram (Diagram 3.1).

The perspectives of the first three developmental studies in this diagram can be illustrated through Bullough's (1989) case study. He investigated the learning process of Kerrie, a newly-qualified teacher. Before teaching, Kerrie planned her teaching materials based on her perception of being a teacher. Discipline in the classroom was included in her plan. She consulted experienced teachers at her school on how to prepare lessons and handle classroom issues, and was confident that she could cope in her teaching. She had an image in her mind of how to teach. This period accords with



the ‘*early concerns about survival*’ of Fuller and Bown, Lacey’s ‘*research for material and ways of teaching*’, and Furlong and Maynard’s ‘*survival*’ stage.

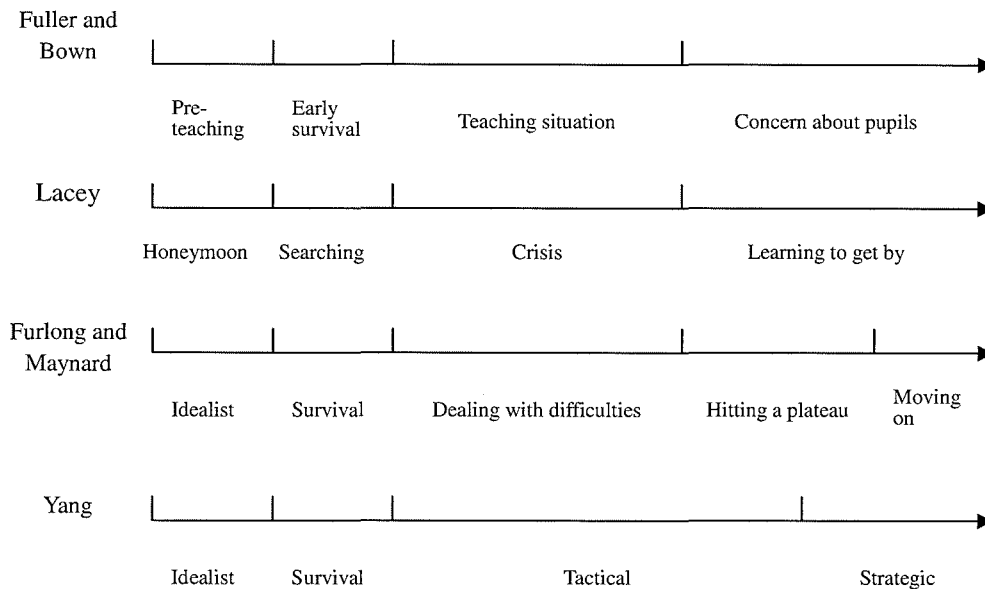


Diagram 3.1 The comparison of four developmental models

However, after Kerrie began teaching, everything became disordered. Disruptive pupils meant that she could not carry out her plan as she had intended. Although she had planned in advance how to ‘manage’ the classroom, the pupils behaved very differently from the way she expected. Although Kerrie attempted to employ the skills she had learnt from other teachers, she found that she was unable to use them. She tried to manage her class in a friendly and warm way, but the situation she faced did not allow her to do what she had imagined she would do, as this might have affected pupils’ learning. Therefore, she concentrated on building classroom ‘order’, thinking that once the pupils were appropriately disciplined they would be able to study well. This is what Lacey calls the ‘*crisis*’ period, or Furlong and Maynard call ‘*dealing with difficulties*’, in which new teachers become more authoritarian as they rush to gain control of the

class. Gradually, Kerrie gained control of her class. Developing her own skills from advice provided by other teachers, she began to manage the class properly in her own way and was able to build a foundation to be developed in the future. She conceded that the idea she held in the fantasy period had to be adjusted. This is Fuller and Bown's '*teaching situation concern*' and '*pupil concern*' and Lacey's period of '*learning to get by*', and may also reach Furlong and Maryand's stages of '*hitting a plateau*' and '*moving on*'.

I consider that these three studies are necessary for further exploring the stage of '*moving on*' or '*learning to get by*', in which reflective practice may occur. That is, it is possible for first-year teachers to step into the reflective stage when their teaching skills or approaches are regarded as being sufficiently effective to cope with the situations they face. After becoming increasingly confident in classroom management and teaching expertise, teachers have the capacity to go further, reflecting on and considering various teaching perspectives, although this depends on personal dispositions or the settings which teachers are in.

Having reviewed these studies of professional development, it is evident that the learning curves of new teachers involve, respectively, classroom discipline, teaching, and pupils. However, these studies fail to consider the potential influence of reflective practice. A concern for classroom discipline begins when student teachers first come into contact with classroom teaching (Hobson et al., 2008), and this is followed by the need to develop teaching strategies and teaching content. New teachers at the earlier period of professional learning shift their focus to the needs of pupils once they have managed to control the classroom environment and feel confident in their teaching. A

change of practice may illustrate a change in their teaching beliefs. However, from literature on professional development, I argue that the reflective aspect should also be taken into account, as it also shows another aspect of the improvement in teaching. That is, when teachers feel that they can cope well with teaching, they tend to consider further teaching knowledge or perspectives. In the next section, I will explore the knowledge student teachers acquire in the teaching practice period and how student teachers learn this knowledge.

### **3.4 The growth of pedagogical content knowledge**

The teaching perspectives student teachers hold has impacts on their professional learning. Shulman (1986) regards that pedagogical content knowledge is crucial in developing teaching expertise and is associated with the understanding of pupils' need. Student teachers with relevant subject matter knowledge can teach properly; however, those with defected understanding of subject matter knowledge may struggle in teaching and classroom management.

In this section, I will explore the knowledge that student teachers learn in the teaching practice period and demonstrate what is included in the knowledge and skills student teachers learn in this period. Shulman (1986) notes that the professional knowledge of teachers may include (1) subject matter knowledge; (2) pedagogical content knowledge; (3) curriculum knowledge. The subject matter knowledge can be divided into content knowledge, substantive knowledge and syntactic knowledge for teaching (Grossman, Wilson & Shulman, 1989). Content knowledge includes factual information, organising principles and central concepts of the subject, which is the basic knowledge base of

teachers who teach their subjects. Substantive knowledge entails the explanatory framework or paradigms that are used both to guide inquiry in the field and to make sense of data. Syntactic knowledge refers to the ways in which knowledge is brought into the field, involving the canons of evidence that are used by members of the disciplinary community to guide inquiry in the field. In primary schools, it is particularly essential in understanding pupils' disposition as pupils should be properly motivated and guided in the learning and teachers have to teach several subjects and deal with frequently classroom management.

Secondly, pedagogical content knowledge refers to the knowledge of learners and how they progress their learning. Shulman (1986:9) indicates that this knowledge includes two important parts: 'the ways of representation and formulating the subjects that make it comprehensible to others' and 'an understanding of whether the learning of specific subjects is easy or difficult'. Teachers should have many ways of representing an idea and know when certain sorts of representation should be adopted, which depend on the pupils they teach. These ways can come from the suggestions of research or from expertise developed from teaching practice.

Thirdly, the knowledge of the curriculum is regarded as the professional knowledge of teachers, especially in the states which have a national curriculum, like England and Taiwan. Curriculum can be described as 'a full range of programmes designed for the teaching of a particular subject or topic at a given level.' In addition, it affects teachers' decisions on choosing teaching strategies for their teaching activities (Shulman, 1986:10).

I consider the knowledge student teachers learn in teaching practice period as pedagogical content knowledge. From the literature I reviewed above, it can be understood that student teachers learn to teach starting with their original perspective and then their perspectives are transformed when interacting with pupils and observing the teaching of experienced teachers. Student teachers learn about their pupils' dispositions and tailor their teaching to the needs of pupils. This kind of learning is pertaining to Shulman's definition of pedagogical content knowledge.

The literature concerning pedagogical content knowledge focuses on the growth of pedagogical content knowledge in certain subjects through the setting of a teacher training course. Geddis (1993) investigated the development of pedagogical content knowledge and indicated that student teachers start their teaching with an incomplete representation of subject-matter knowledge. At this point in time, they frequently teach subject-matter knowledge in the (often single) way that they consider pupils learn. The teacher training course provides student teachers with many alternative ways of teaching, or teaching tactics. Eventually, student teachers come to understand the importance of the disposition of pupils and tailor their teaching to the needs of pupil. Jones (1996) also mentions that student teachers start to teach and prepare their teaching materials with their original perspective concerning subject-matter knowledge and then deliver them in the classroom inflexibly. After a teacher training course their teaching becomes more flexible, taking into account the situations in classroom they have encountered, because they took note of pupils' dispositions. Stump (2001) indicates that student teachers focus their teaching at first on subject-matter knowledge per se. Only after they perceive the difficulties pupils have in understanding their teaching do they move on to explore the disposition of students and adapt their teaching

to that. The studies of Hill, Ball and Schilling (2008), Wilson and Berne (1999) and Chapman (2005) all demonstrated similar results concerning the development of pedagogical content knowledge.

After reviewing the process of learning of teaching and the knowledge student teachers acquire during the process, I have attempted to build a model to demonstrate how student teachers learn and which factors impact on the process of professional learning to teach.

### **3.5 Establishing a model for student teachers' learning during the teaching practice period**

In this section, I plan to explore the learning of student teachers, in terms of changes in their teaching beliefs, from three perspectives: socialisation, reflective, and developmental. The diagram next page (Diagram 3.2) is a synthesis of my analysis, based on a critical examination of the literature presented earlier and the focus of my study, which is to investigate the changes in student teachers' beliefs, if any, and to identify the reasons for any changes. This is a hypothetical model and will be explored and refined via the subsequent data analysis of my empirical study, which will be displayed in Chapters 5 to 9.

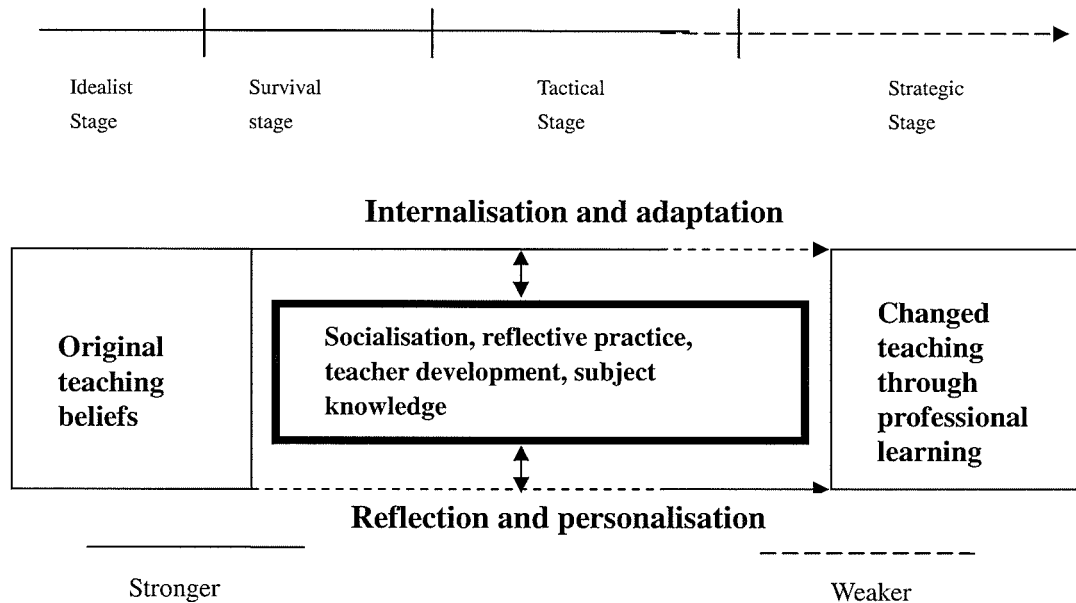


Diagram 3.2 The model of professional learning of student teachers during teaching

### 3.5.1 The four stages

In the diagram above, I theorise that student teachers internalise and adapt how to teach, adapting in the early stages of the teaching practice to the values and protocols of their schools. This affects strongly (represented by the unbroken line) the teaching behaviour of student teachers. In the latter part of the teaching practice period, these become weaker (broken line), as reflective practice becomes more prominent and teaching expertise develops through the personalisation of professional judgements. In the initial *idealist stage*, student teachers bring their original beliefs about learning to teach to their teaching practice period, such as a subject-centred, child-centred, or an instruction-follower approach (referring to those who consider that learning-to-teach means just following the instructions of their mentor). Self-evidently, they have the perspective of teachers without any teaching experience. The *survival stage* occurs when student teachers begin to teach. They attempt to accustom themselves to a

teaching career and develop their teaching strategies and skills from their original perspective. However, lacking teaching experience, they may struggle to cope with a classroom of pupils. They may imitate the behaviour or follow the perspective of their mentor. Nonetheless, in most of cases, the results are not what they expect. Thus they may worry about how or if they can become teachers.

Then, in the next stage, student teachers search for skills or approaches to cope with the difficulties they encounter and they may consider the suggestions of mentors or other individuals. I refer to this as the *tactical* stage because, at this stage, student teachers attempt to become familiar with how to use teaching tactics, and which ones, in their teaching practice. A tactical approach is one that implies immediacy and reactivity to a particular situation, with student teachers copying in large part what they have seen in others. When teaching, student teachers use these tactics by resorting to their personal knowledge in teaching concerning, for example, the experience they had when at school themselves or their learning in institutes of education. The use of these tactics are tailored to the situations they encounter, through reflection-in-action, continuous testing and modifications in teaching, and afterwards through reflection-on-action after classes. I consider that socialisation plays an important role in this stage. This is because student teachers have fixed ideas about subject matter knowledge and because a lack of knowledge about their pupils means that they cannot efficiently tailor their teaching to the needs of pupils.

When reviewing the literature in section 4.3, I considered the possibility that student teachers stepped into reflection after learning teaching tactics, as mentioned by McIntyre (1993), Jay and Johnson (2002) and Lee (2005). McIntyre (1993) identifies



three different levels of theorising and reflecting: the technical level, the practical level and the emancipatory level. The emancipatory level happens after the practical level, when teachers consider that learning teaching skills is important. In the same vein, Lee (2005) identified three levels: recall, rationalisation, and reflectivity. Jay and Johnson (2002), additionally, referred to the dimensions of new teachers' reflective thinking in three facets: descriptive, comparative, and critical reflection, and that these happen in sequence. It can be argued from these three studies that reflection happens after student teachers learn how to use teaching tactics.

Thus, considering the implications in these studies, when satisfied with the progress of learning-to-teach tactically, some student teachers, who may be encouraged by their mentors to reflect, and motivated by their personal disposition or benefiting from good school leadership, move to the *strategic stage* in the teaching practice period. Student teachers in this stage find that their teaching expertise develops through reflection-in-action and reflection-on-action in teaching and classroom management. In addition, they develop their own teaching strategy and can judge effectively how to teach and prepare teaching materials, rather than simply following others' advice or trying different teaching tactics or approaches. A strategic approach is one in which longer-term thinking replaces the immediacy of the tactical stage. Student teachers become proactive, based on their generalising about a range of situations and combining this with theoretical knowledge and their own learning experiences. They develop professional judgements about how to teach, knowing how to design their own teaching schedules and coping with classroom contingencies flexibly by considering the background and dispositions of pupils. In this stage, reflection plays a major role in the learning of student teachers. Student teachers do not simply understand the subject

matter knowledge per se but adjust and adapt it to pupils' needs. Compared with the idealist, survival and tactical stages, it can be obviously perceived that the pedagogical content knowledge has improved.

### **3.5.2 Behaving like a teacher**

I consider that four concepts of 'behaving like a teacher' are the right ones to explain the experience of student teachers. The model progresses through the stage of *idealism* (behaving like the teacher they would like to be), *the survival stage* (behaving like a teacher unsure of how to behave), and the *tactical stage* (behaving like other teachers) and on to the *strategic stage* (behaving like the teacher they know they can become). In the first three stages, student teachers resort to their personal experience and imitate the skills or approaches suggested by their mentors and other teachers. They first learn how to teach well by applying these skills or approaches in classroom practice. However, they have not started to consider tailoring their teaching to pupils' needs, which will happen in the next stage.

At the final stage student teachers start to re-examine their university learning and form their own teaching perspectives, which they implement and modify in classroom practice (Hobson et al., 2008). At this stage, teaching beliefs are formed first, and then modified after implementation. Other studies, whether from the perspective of teacher socialisation (internalisation and adaption), or reflective practice (reflection and personalisation) and development, fail to show the intention of student teachers to behave like teachers during the teaching practice period, through consideration of pupils' needs when designing their teaching.

### 3.6 Conclusion

This chapter has explored student teachers' model of learning-to-teach, and I have argued that student teachers may begin to reflect when they feel confident about their teaching. The concept of 'behaving like a teacher' can best perhaps illustrate how student teachers learn to teach. This model, which was theorised when I reviewed the literature concerning my two research questions, demonstrates the factors that affect the professional learning of student teachers. Moreover, it takes into account how these factors influence the learning of student teachers through socialisation and reflection, going through four phases of development: idealist, survival, tactical and strategic.

I argue that insufficient attention has been paid to how teachers position themselves to behave like teachers. Studies have failed to identify the fact that the learning of student teachers might move from behaviour guiding beliefs to beliefs guiding behaviour. Having reviewed these related studies, it should be noted that the sociological and developmental perspectives fail to acknowledge that there can be a strong reflective aspect to student teachers' learning. On the other hand, the studies associated with reflective teaching simply focus on the reflective practice of student teachers and neglect the fact that it is behaving like a teacher that plays an essential role in reflective practice in the process of learn-to-teach. With the application of this idea of 'behaving like a teacher', learning to teach can be considered as beginning with copying others' teaching behaviour, which affects beliefs about teaching and ends with the formation of personal perspectives. These then guide teaching behaviour. In the next chapter I demonstrate the research design, and how it is employed to explore the learning

experience of student teachers, attempting to discover how/if some student teachers reach the strategic stage, and, if so, what the factors are that bring this about.

## **Chapter 4**

### **Methodology**

In this study I am exploring the professional learning of a group of student teachers during their teaching practice in Taiwan. In so doing, I am attempting to address the following two research questions:

1. What factors enhance or hinder the professional learning of Taiwanese student teachers during the teaching practice?
2. How do these factors influence their development as beginning teachers and their broader learning experience?

This chapter provides a description and justification of my methodology, including the way in which the study was designed and carried out, and the means by which the data was analysed.

#### **4.1 Epistemology**

Epistemology is the study of the origin, nature, and limits of human knowledge. An understanding of epistemology is important because it affects the quality of the knowledge humans acquire and, particularly, the way in which all research is designed. In this study, I consider knowledge to be socially constructed through dialectic interaction between individuals and social reality. Knowledge consists of the opinions, beliefs, or principles held to be true by a person, organisation, or especially, by society at large. In other words, I position my research from the perspective that individuals form and re-form their identities through their interaction with society and that social reality is itself a dynamic process, similarly formed and re-formed through the activities

of individuals (Berger and Luckmann, 1971). The current study's epistemological stance can be traced back to my high school years, when I became interested in social sciences such as history and geography. I intuitively remembered the details of the narratives and the names of places or people in the books that I read. At university, I developed a keen appreciation for interpretation. I discovered that the same events and historical relationships are interpreted in different ways according to the perspective of the person doing the interpreting. I began to think about how a person's behaviour influences their environment or is affected by it or by interaction with others.

Adopting this epistemological approach takes adequate account of the great many factors which affect the teaching practice of student teachers. Having been a probationary teacher for one year, and having studied in an education-related field for several years, I feel that the learning-to-teach process is, to a great extent, affected by the social environment. This is mainly because of interaction between significant individuals involved with the teaching practice period, such as tutors, mentors, pupils, experienced teachers in schools, parents, and others. Values or beliefs that cannot be definitively identified also affect the behaviour of these individuals. For example, the beliefs of student teachers and mentors may affect their interactions and student teachers' performance, while the performance and reactions of pupils may influence the teaching of student teachers. Mentors also play an important role in student teachers' learning. The attitude of mentors towards teaching practice may determine whether or not a teaching practice scheme can be appropriately implemented to meet the needs of student teachers. As I discuss below, a positivist approach is inadequate for properly understanding the variables which influence teaching practice. By contrast, an interpretivist approach to the data collected can provide a far more in-depth account of

the factors affecting student teachers' professional learning. The interpretivist approach of the current research project can achieve a greater situated generalisability.

A positivist methodology can be applied to some extent. Positivism approaches existing reality through the methodological collection of data, and findings are regarded by exponents as based on a universal causality. Findings are thus usually regarded as 'value free', and widely recognised by the public at large to be true (Robson, 2002). Questionnaire surveys are one data-collection method used to gather information. In relation to teacher training, they can be used to reveal the feelings and opinions of a large number of student teachers about their teaching practice period. Statistics also provide a reliable way to interpret data easily, and from this to develop general theories to explain reality. However, this approach cannot provide the answers to the research questions posed by the current study. A questionnaire survey could reveal respondents' perspectives to some extent, but it cannot adequately probe or question their beliefs or attitudes (Robson, 2002). In his book on conducting methodologically valid research, Denscombe (1998) argues that

*Questionnaires, by their very nature, can start to impose a structure on answers and shape the nature of the responses in a way that reflect the researcher's thinking rather than the respondents'. (106)*

Social constructivism emphasises the constructive process of reality, which is formed and influenced by interaction between individuals and their environmental contexts. This reality can be revealed through interviews, reflective journals, and an analysis of critical incidents. All of these are rich sources of data and provide a deeper insight into how and why student teachers learn and of how contextual factors affect their learning.

## 4.2 Research Strategy

A case study aims to investigate a particular phenomenon with a view to providing an in-depth account of the events, relationships, experiences or processes which are occurring in that particular instance (Merriam, 1988; Denscombe, 2003). It is an empirical enquiry and is conducted within a localised boundary of space and time, focusing on a particular set of events, programme, institution, or classroom (Bassey, 1999). The epistemology of this approach thus accords with a social-constructivist paradigm, because a case study reveals information about individuals acting in a particular setting in a certain space and time. My study can be regarded as a case study because it explores the learning of student teachers during their period of teaching practice in Taiwan by using rich sources of data about their reported experiences.

Case studies have been categorised by Stake (2003). Using his terminology, my study can be regarded as a hybrid instrumental case study, because its research purpose incorporates both personal interests and external purposes. Stake defines an instrumental case study as a study which examines certain cases in depth, scrutinises their context and ordinary activities, and helps researchers to pursue external interests. The researcher is not simply interested in the particular traits or problems of the cases under examination, nor is the case itself particularly emphasised; rather, cases are chosen because the researcher intends to employ the results of the research for other purposes. The focus of the current study is to understand the professional learning of student teachers, in terms of how they transfer their professional learning to teaching practice and development of teaching expertise. The results of my study will offer



insights for mentors, tutors, and other related individuals, and help these groups to consider effective ways to help student teachers learn to teach. The study may also illuminate policy makers' on-going attempts to improve the setting in which teaching practice takes place, thus providing a better environment for student teachers in which to learn to teach.

I concluded that a case study approach was the best strategy after considering four possible alternatives. The first that I considered was an experimental or quasi-experimental research design. This approach can help researchers to clarify the relationship between independent and dependent variables (Robson, 2002); for example, the relationship between smoking cigarettes and the incidence of lung cancer. The prerequisite of experimental study is that it must be context-free, and its results are supposed to show the precise relationship between variables. However, my study seeks to engage actively with variables, because of their richness and because of the study's socio-constructivist perspective. I therefore did not choose an experimental approach, because such an approach deliberately neglects the influence of contextual factors. A case study can provide richer data when compared with an experimental study and can identify how many factors interact, leading to relatable conclusions. This is suggested by Bassey's idea of 'fuzzy generalisations'<sup>8</sup> (1999).

The second research strategy option was ethnography. When performing ethnographic research, researchers have to become deeply involved in the lives of their research objects, with the result that the meaningfulness of subjects' lives is revealed (Tedlock,

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<sup>8</sup> Bassey (1999) defines 'fussy generalisation' as a kind of generalisation which can accommodate exceptions. It concedes that a single study is not adequate for exploring all factors, because of the complexity of human activities. This idea is different from 'scientific generalisation', which cannot tolerate any exceptions.

2003). This research strategy provides a much deeper and richer description of a particular case than other approaches. Research employing this approach may draw a wealth of information from one selected case. However, the application of this strategy is rather time-consuming and only a very small number of samples can be investigated, which may affect the validity of drawing general conclusions. By contrast, a case study approach allows the investigation of a broader sample, offering a better opportunity to achieve a wider understanding of the professional learning of student teachers and to approach Bassey's fuzzy generalisation.

Action research was the third approach I considered. It is a strategy that can obtain rich and in-depth findings and it is usually applied in practical situations: 'dealing with problems and issues, typically at work and in organisational settings' (Denscombe, 2002). Researchers are able to change or improve the situation by participation, and by being fully involved in practice it may be easier for the researcher to sense the meaningfulness of the selected sample. However, I could not employ this approach in the current study, mainly because I am not involved in teaching practice as student teacher or mentor.

My fourth option was a questionnaire-focused survey, which can help researchers to collect the data they require from a large sample in a short time (Robson, 2002). However, this method elicits only restricted responses to the questions asked, and cannot provide the researcher with an opportunity to acquire a deeper, richer, and more detailed understanding of the data acquired. Thus, it cannot sufficiently facilitate an in-depth evaluation of the practice of the teaching practice period. In addition, the findings of a questionnaire survey cannot illustrate the process of professional learning

during the teaching practice period. I did draft a questionnaire survey. However, I discarded it because, while indeed it would have been able to provide me with much factual information, it would not be able to show how student teachers learn to cope with difficulties individually and how or if they change their teaching beliefs during the teaching practice process. The advantage of interviews, by contrast, is that because of the face-to-face, personal nature of the interview I could probe and follow up answers.

Critics of the case study method usually doubt the validity of any generalisations drawn (MacDonald and Walker, 1975; Yin, 2003). Although every contribution to a field generalises to a certain extent from phenomena, doing so from a case study is problematic because research subjects are usually examined in a particular context. Findings in one context do not necessarily relate to other contexts. Thus, there is a danger that much of a case study's data will be irrelevant to wider application (Yin, 2003: 10). Atkinson and Delamont (1985b) criticise case studies' singularity in the same vein, and reject generalisations. They suggest that a study should develop a general framework, and they judge that a case study 'will be doomed to remain an isolated one-off affair, with no sense of cumulative knowledge or developing theoretical insight.' (39)

Nevertheless, I would argue that a case study can be generalised to an extent. Discussing how to apply a case study more broadly, Yin (2003) states that 'a previously developed theory [can be] used as a template with which to compare the empirical results of the case study. If two or more cases are shown to support the same theory, replication may be claimed' (Yin, 2003: 31). He terms this 'analysis generalisation'. Stenhouse (1978) has a similar perspective, suggesting that 'retrospective

generalisation' can be generated from analysing the accumulation of data from a case study.

In addition, Stake (1995) identifies two kinds of generalisation: 'propositional generalisation', which is generated from a case study's process assertions, and 'naturalistic generalisation'. Process assertions may come from a case study with a small database, and the process of further generalisation through the interpretation of readers is termed 'naturalistic generalisation'. Stake hopes that the particularity of a case study can be eliminated by means of readers' interpretations. I agree with the perspectives of Stenhouse, Stake, and Yin, who argue that generalisations can be made when many studies, conducted with similar research approaches and samples, produce similar results. In relation to this, my study of the learning of student teachers can be generalised by comparing it with other studies on student teachers that use qualitative data collection methods, such as interviews, observation, and reflective journals.

Some scholars see the whole debate as a misdirection of effort and time. Simons (1996) proposes that both universal meaning and uniqueness inevitably co-exist in a case study and that the same applies to other research strategies. An investigation of the tension between the unique and the universal in a case study enriches the understanding of the case and raises the possibility of seeing new things from a range of research perspectives.

The particularity of my case study does not mean that my investigation does not provide any opportunities for drawing general insights. Other studies can apply a similar approach or research method to the professional learning of student teachers or their

mentoring support, with a view to discovering whether similar findings can be achieved. Yin (1994) describes this as 'analysis generalisation'. Bassey's (1999) 'fuzzy generalisation', as I noted earlier, may be generated from a single case study, and findings may be considered to be general even if the study has a degree of uncertainty. Findings similar to those from a case study may be found in other locations.

## **4.3 Research Design**

### **4.3.1 Previous research design**

At the outset, I undertook a pilot study designed to test the suitability of the original research design. The findings of a pilot can be useful for reassessing, if necessary, a research project's aims. A questionnaire was employed as the main research instrument. This was followed by interviews to obtain further information about the revised teaching practice scheme. Student teachers, university tutors, school mentors, and government administrative staff, either in local authorities or the Ministry of Education, were asked to answer a questionnaire and were then interviewed. The pilot study showed that administrative staff were not very involved in teaching practice, even though they had a slight supervisory role. Non-administrative respondents and interviewees confessed that they did not know the responsibilities of administrative staff, while administrative staff indicated that they had very limited influence on teaching practice. I therefore decided to exclude them from the fieldwork of the main study.

However, after one year of study in the UK, and having reviewed the literature relating to student teaching, I became much more interested in studying the professional learning of student teachers, rather than in simply exploring how teaching practice schemes were implemented. This was when I decided to take a case study approach. With a view to obtaining more data about the professional learning of student teachers, I decided to use interviews as the main research method, since these would enable me to collect detailed and in-depth data related to my chosen topic (Denscombe, 2002). Other sources of data could be employed to examine and support the information provided during interviews. The questionnaire and part of the interview schedule were similar to those applied in the pilot study, although radical changes were made in the interview schedule of the student teachers and the critical incident technique (Tripp, 1994) was introduced to the interviews.

As noted above, the original version of the research design identified student teachers, school mentors, and university tutors as the three categories of interviewee. The final interview schedule for the student teachers was redesigned to explore the professional learning of student teachers from two different routes into teacher training. These were undergraduates, who studied in education-related departments, and undergraduates or postgraduates, who had not majored in education but had attended teacher-training programmes in university institutes of education. The interview schedules for university tutors and school mentors were also slightly modified, but remained similar to those used in the pilot. The data obtained from interviewing student teachers became the main resource to be analysed, since this provided a wealth of information about the professional learning of student teachers and the kind of support they received. In the final research design, the information obtained from interviewing university tutors and

school mentors was used to support the data provided by student teachers. Since student teachers, university tutors, and school mentors were paired, the perspectives of university tutors and school mentors could be used to examine the opinions of student teachers. Some information was found to overlap. Not all the interview data was completely transcribed because part transcription of the interviews was enough to help me understand whether the research design was workable. This was the main purpose of the pilot study. Furthermore, a full transcription would have been too time-consuming.

In the original research design, the investigation sample consisted of twenty teachers. There were two reasons for this. First, one of the original purposes of this study was to identify the factors that might either benefit or hamper the learning of student teachers during teaching practice. Thus a larger sample of interviewees would complement the findings of the questionnaire survey by allowing a fuller range of factors to be noted. Second, a larger sample was needed to cover the learning experience of student teachers from different routes.

In both the pilot study and the original research design the questionnaire survey was designed to evaluate teaching practice by having as respondents student teachers, university tutors, and school mentors. However, having reviewed the findings of the questionnaire survey and interviews from the pilot study, I decided to explore other aspects of the professional learning of student teachers. The results of the questionnaire did not provide convincing evidence relating to the 'how' and 'why' of student learning, but only the 'whether': for example, whether student teachers were satisfied with the support they received from mentors in learning how to do pastoral work. In addition, it

was difficult to triangulate the data from the survey with the findings from interviews and the reflective journals. As my research interest changed, the survey data, which was mainly designed to investigate whether the implementation of the teaching practice period was satisfactory for those concerned with it, did not provide useful information that could confirm the data gathered from other routes.

While performing the preliminary analysis, one of the university tutors interviewed suggested that, since the student teachers to be interviewed had kept reflective journals, these could be used in the study. Student teachers, university tutors, and school mentors all agreed to this, and as a result twenty reflective journals were collected and applied to the study. Reflective journals provided a deeper insight into the topic and offered a wealth of information to be interpreted. However, their use may raise some ethical issues, which are discussed in Section 6 below.

#### **4.3.2 Final research design**

For the final version of the research design, I decided that the rich data collected from student teachers could provide a deeper understanding of the learning of student teachers during teaching practice, and that, consequently, the data to be analysed would be based on the learning experience of student teachers and mentors. As noted above, this data was collected through three research methods: interviews, reflective journals, and the technique of critical incidents (I explain and justify the use of critical incident theory in Section 4.5.4 below). The analysis of the learning experience was taken from twenty student teachers and twenty mentors during their teaching practice period in Taiwan. It further identifies the different learning experience of student teachers from



the two different routes into teacher training, and the factors which may affect the learning experience of student teachers.

#### **4.4 Sample**

With the aim of understanding how a group of student primary-school teachers learn during teaching practice, twenty student teachers were chosen from five primary education institutions in Taiwan for interview and for a review of their reflective journals. Twelve student teachers were from three institutes of education in universities, and were chosen because the heads of these institutes agreed to support the study. A further eight student teachers were chosen from two related departments of education, and although I did not know how the universities or departments chose the samples, I have no reason to believe that it was done in a way that would have skewed the impact or affected the quality of the study.

Originally, I had considered using a small sample of around four or five cases. However, I believed that it was possible to select successfully a larger sample of student teachers in teaching practice from across Taiwan and representing the two routes of teacher training. In addition, a larger sample would provide a selection of student teachers with a variety of teaching beliefs, which would provide a greater understanding of how student teachers socialise and undertake reflective practice in their teaching practice. Understanding these two elements would allow me to establish a theoretical model to explain how student teachers in Taiwan learn and to understand which factors lead to a successful or unsuccessful professional learning outcome. I am aware that the data only represents the accounts of student teachers and did not offer convincing data to

demonstrate conclusively the beliefs of these student teachers (Dingwall, 1997). A similar situation is also demonstrated in the study of Hobson et al (2008).

*..... whilst we see the expressed views of student teachers themselves to be central to any attempts to explain and understand of ITP (initial teacher preparation), we must nevertheless acknowledge that the findings presented above are based solely on student teachers' accounts and may therefore tell only part of the story. (419)*

Thus, further evidence needs to be provided to confirm the accounts of student teachers. Mentors supervised the teaching of student teachers and their 'accounts are (thus) perhaps the single most important source of evidence relating to the practice of beginner teacher mentoring' (Hobson et al., 2009: 213). Thus I decided to interview the mentors also and their interviews were sat against the data collected from the student teachers.

## **4.5 Research Methods**

This section will explain how this empirical study was conducted using semi-structured interviews, reflective journals, and a critical incident technique, and note some possible limitations that may have affected the study.

### **4.5.1 Rationale for the choice of research method**

The research methods used in this study were applied with triangulation in mind. Triangulation uses multiple measures to examine the same phenomenon, and it is hoped that biases can be reduced and validity be better established (Yin, 2003). The current

study uses a mixed-mode research design of interviews (two-stage interviews in the case of student teachers, one interview in the case of mentors), a critical incident technique (conducted first), and student teachers' reflective journals (which were collected at the end). The research method applied in this study also raised an issue concerning the application of triangulation, which claims to use multiple measures to examine the same phenomenon, and thereby, the bias of the study can be reduced and its validity constructed (Yin, 2003). This study uses interviews, critical incidents and reflective journals as ways to collect the data. Also, since the aim of the study is to understand the learning of student teachers from two different routes of teacher training, the sample included at least three student teachers from each route.

However, triangulation has its critics. For example, Miller (1983) argues that the concept should be abandoned, since it fails to illuminate meanings, while Fielding and Fielding (1986) argue that triangulation does not necessarily reduce bias, although using different methods to investigate a phenomenon can be said to provide broader insight into a particular issue. Blaikie (1991) also doubts the claims of triangulation. He regards triangulation as no more than investigator triangulation, because the combination of research methods used is still applied with the same ontological and epistemological assumptions.

The collected data has provided rich and abundant information. This has enabled a detailed understanding of the professional learning of a group of student primary school teachers undertaking teaching practice in Taiwan. In addition, since the data from the reflective journals was not originally designed to be collected, but was acquired from the university tutors afterwards, it is free from any researcher bias and is thus an

authoritative source against which the validity of the interview data can be tested. There may be an ethical concern here, since the student teachers were not at first informed that their reflective journals would be used as research material, and so their consent was secured before collection. The perspectives that mentors expressed in interviews were used to examine the viewpoints of student teachers.

As discussed above in Section 4.3, questionnaires and observation were not employed in the current research design, although a questionnaire survey might have helped me to collect the data from a wide sample range in a short time (Robson, 2002) and was originally one of the research methods I planned to use. However, it was found that this way of data collection allowed researchers to obtain only a restricted amount of data and could not provide richer, deeper, or more detailed understanding of the teaching practice of student teachers.

The study was originally designed to investigate the professional learning of twenty student teachers from around Taiwan over a period of less than six months, which is the duration of the teaching practice period. Consequently, due to the amount of time it consumes, observation was not applied as a research method (Yin, 2003), even though it could have provided deeper insights. Also, my main concern was to hear and read student teachers' own accounts of their teaching experience, because their perceptions are the most important aspect of my study. However, the lack of observation may raise a concern that the data is uncorroborated and self-reported, and that, therefore, the reliability and validity of the research is problematic. Cook and Campbell (1979) note that interviewees tend to report what they think that the interviewer expects to hear. Schacter (1999) further notes that human memory is not reliable, and that self-reported

data usually has less consistency and reliability. Such limitations are addressed in the current study through the use of the critical incident technique in the interviews and reflective journals. The critical incident technique, which was applied in interviews, required interviewees to remember important events and to give detailed examples from their teaching and learning. These were then corroborated through a comparison with their written reflections from the time of the events. Students were writing their reflective journals during the same period in which interviews took place, and because at that time they did not know that the journals would be used for research purposes they could be usefully compared with the interviews. The use of reflective journals is explained in more detail below, in Section 4.5.3.

#### **4.5.2 Semi-structured interviews**

Semi-structured one-to-one interviews were chosen because, by asking pre-determined questions, I could decide which questions to ask according to interviewees' perception of the situation and explore any aspects which were of particular further interest (Denscombe, 1998; Robson, 2002). Many aspects of student teachers' professional learning can be uncovered by this approach: for example, their understanding of teaching, the situations they find themselves in at school, and their teaching behaviour. This type of interview gives researchers more opportunities to gather information regarding interviewees' perceptions, attitudes, ideas, and thoughts, which may thus truly reflect the learning experience of teachers (Blaxter *et al.*, 2001; Robson, 2002). Moreover, since interviewees are allowed to express their opinions freely during interviews, I was able to discover intriguing and important viewpoints beyond the scheduled questions. Another advantage is that one-to-one interviews can easily be

arranged and are relatively easy to control (Dencombe, 2002). However, the disadvantages should also be noted. For example, the personal perspectives of the researcher may influence the responses of the interviewee, and it is difficult to elicit information from interviewees who are introverted. Interviewing by means of focus groups may address this problem to some extent.

Despite this, I chose one-to-one semi-structured interviews for this research for two reasons. The first is that student teachers belong to schools in different areas, so it would have been difficult to find mutually-available free time for group interviews. Second, one-to-one interviews enabled me to have more time and space to investigate the teaching experience of individual student teachers thoroughly and in depth. Although a group interview might have provided an opportunity for several student teachers to exchange views about teaching and encourage them to speak more (Robson, 2002), I also feared that the data collected might have tended to be artificial. In a group interview, introvert interviewees can be encouraged to talk and the opinions exchanged in a group can help interviewees to say more about their personal experience (Denscombe, 2002; Robson, 2002). However, this type of interview gives researchers limited opportunity to look in depth at the experience of particular interviewees. In addition, some student teachers preferred to be interviewed on a confidential basis and were reluctant to share their personal experiences in a group.

The interviews consisted of two stages, with the aim of investigating the learning of student teachers during teaching practice. The first stage (see Table 4.1) was designed to discover interviewees' perceptions of teaching that exist before and during the earlier phase of teaching practice, including their beliefs about themselves as teachers, their

views on learning to teach, learners, and learning, and how they interact with mentors, other colleagues, and pupils.

- |   |
|---|
| <ol style="list-style-type: none"> <li>1. How do you analyse your experience during your initial teacher education?</li> <li>2. What does being a teacher mean to you?</li> <li>3. How do you evaluate your own past teaching experiences?</li> <li>4. How do you see teaching/learning processes?</li> <li>5. What were your expectations about teaching and being a teacher in a school?</li> <li>6. Could you describe a situation from which you have learnt during this period?</li> <li>7. Which of the duties required of you as a teacher so far do you find most demanding and challenging?</li> <li>8. What impression do you have of the school in which you are teaching?</li> <li>9. What about your relationships with colleagues? Are they supportive?</li> <li>10. What about the head-teacher and the existing school facilities?</li> <li>11. Could you describe your relationship with your students?</li> <li>12. Was there any particular activity which aimed to introduce you to this school or to your new responsibilities as a teacher?</li> <li>13. What kind of support have you had so far?</li> </ol> |
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Table 4.1 Interview Schedule for Student Teachers (Stage 1)

Changes in the professional learning of student teachers during teaching practice were explored in the second stage of the interview (see Table 4.2), which took place between 20 December and the following January, when their teaching practice in Taiwan was almost complete. I explored their beliefs about themselves as teachers, as well as beliefs about learners and learning, learning to teach, the factors which affect teaching, interaction between mentors, school colleagues and pupils, and the difficulties encountered in the teaching situation. The questions probed the professional learning of student teachers retrospectively, focusing on how student teachers teach, how they manage the classroom, and how they cope with their relationship with their pupils. In the first stage of the interview schedule (Table 4.1), questions 1–3, 5, and 7 were designed to identify the beliefs student teachers bring to the teaching practice period, while questions 4 and 6 were designed to discover student teachers' original beliefs

about learning to teach. The factors which may influence the learning experience of student teachers are revealed in their responses to questions 8–13. A critical incident technique is used in questions 6 and 7, for using reasons explained in Section 4.5.4.

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| <ol style="list-style-type: none"> <li>1. How do you evaluate your experience throughout your teaching practice?</li> <li>2. What were your most significant experiences during teaching practice?</li> <li>3. Have you changed your behaviour/performance/understanding since the beginning of the teaching practice year?</li> <li>4. Can you describe any particular event or events you can remember?</li> <li>5. How do you see your role as a teacher?</li> <li>6. How do you define good teaching?</li> <li>7. Which of the duties required of you as a teacher do you find most demanding and challenging?</li> <li>8. Looking back on your own experience as a teacher during teaching practice, what kind of learning experiences can you remember?</li> <li>9. Could you describe a situation from which you learnt during teaching practice?</li> <li>10. What has been the effect of this on your attitude toward, and practices of, teaching? Please give examples.</li> <li>11. What kind of support have you had during teaching practice?</li> <li>12. How did you face the difficulties you encountered during teaching practice?</li> <li>13. What kind of support would you have liked to have had?</li> <li>14. Looking back on your own experience as a teacher during teaching practice, what are the most significant (both positive and negative) experiences that you can remember?</li> <li>15. How do you analyse your experience as a teacher in teaching practice?</li> <li>16. Could you identify specific/different phases during teaching practice in terms of how you and your learning changed?</li> <li>17. How did your teaching practice period affect your attitudes about teaching and teaching practices?</li> </ol> |
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Table 4.2 Interview Schedule for Student Teachers (Stage 2)

The questions from the second interview schedule (Table 4.2) were designed to address three main areas: changes in teaching beliefs and concepts (questions 1, 3, 5, 6, and 15), changes in the process and development of learning to teach (2, 4, 8, 9, 12, and 16), and the factors which affect learning to teach (6, 10, 11, 13, 14, and 17). Critical incident



techniques were used in questions 2, 4, 7, 8, 9, 14, and 16, and the second stage of the interview was designed to last for between 40 and 70 minutes.

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| <ol style="list-style-type: none"> <li>1. What did you think of your student teacher at the beginning of the teaching practice period?</li> <li>2. How did you supervise your student teacher's teaching?</li> <li>3. Based on your experience of being a mentor, do you think it is necessary for mentors to receive instruction on how to supervise student teachers at the advanced stage of their practice?</li> <li>4. What do you think of the arrangement for teaching practice in your school?</li> <li>5. What kind of changes in your student teacher impressed you?</li> <li>6. How did you help your student teacher to manage the classroom?</li> <li>7. Can you describe a situation from the teaching practice period in which your student teacher impressed you?</li> <li>8. How did you evaluate the teaching performance of your student teacher during teacher practice period?</li> <li>9. What do you think of the arrangement for workshops in your school for discussion of the teaching practice period?</li> <li>10. In general, how does a student teacher's attitude affect teaching practices? Please give examples.</li> <li>11. What do you think of the performance/behaviour of student teachers?</li> <li>12. Could you identify specific/different phases during teaching practice in terms of your student teacher's learning to teach?</li> <li>13. What do you think of the teaching practice period?</li> <li>14. Do you still have any suggestion for improving the teacher practice period?</li> </ol> |
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Table 4.3 Interview Schedule for Mentor

Mentors were also interviewed about their views on the teaching performance of their student teachers. The questions in the schedule (Table 4.3) also focus on the same three themes: changes in teaching beliefs and concepts (questions 1, 5, 7, and 11), changes in the process and development of learning to teach (2, 6, 7, 8, and 12), and the factors which affect learning to teach (3, 4, 8, 9, 10, 13, 14, and 17). Critical incident techniques were used in questions 5, 7, and 20. Mentors were interviewed on the same date on which the second interviews were their student teachers were held. This mentor interview was designed to last from between 40 and 70 minutes.

Topics/Technique	Number of Questions Stage 1 of student teachers	Number of Questions Stage 2 of student teachers	Number of Questions of mentors
Changes in teaching beliefs	1, 2, 3, 5, 7	1,3, 5, 6, 15	1, 5, 7, 11
Process of learning to teach	4, 6	2, 4, 8, 9, 12, 16	2, 6, 7, 8, 12
Factors which affect learning to teach	8, 9, 10, 11, 12, 13	7, 10, 11, 13, 14, 17	3, 4, 8, 9, 10, 13, 14
Critical incident technique	6, 7	2, 4, 7, 8, 9, 14, 16	5, 7, 10

Table 4.4 The distribution of interview questions by topic and technique

In Table 4.4, I have identified the three main themes of my research questions: changes in teaching beliefs, the process of learning to teach, and factors which affect the learning to teach of student teachers. They are related to my three research questions: changes in teaching beliefs provide information on the original perspectives of student teachers (research question one) and on the progress student teachers make in teaching practice period (research question two). Questions concerning the process of learning to teach provide information on how student teachers develop their teaching expertise and learn to teach (research question two again). The questions concerning factors which affect learning to teach correspond to my third research question.

The student teachers were interviewed alone, and were given sufficient time to answer the questions, to recall the situations they had encountered in the classroom, and to explain their perspectives. The mentors were also interviewed alone (it was particularly important that the student teachers were not there). The interview questions were provided in advance, and the interviewees were told that the interviews would be recorded but kept completely confidential and used only for research purposes. Interviewees could thus be properly prepared. It is possible that student teacher interviewees may consciously or unconsciously report incorrect information; however, as interview findings would be cross-referenced with findings from the critical incident technique, the reflective journal, and mentors' perspective, inconsistencies would be

noted and commented on. The interviews took place in the classroom, where the student teachers felt comfortable, and where they could easily be reminded of their teaching practice. They were held in a relaxed manner to encourage the interviewees to express their opinions freely, so that the researcher could acquire as much information as needed. If the classroom was not available, a quiet place was chosen instead. The questions in the schedule were not asked sequentially or mechanically; the order was flexible and dependant on the responses of interviewees and the process of the interviews. The interviews were set up to be more like conversations, so that there could be exchanges of opinion. The questions were explained to the interviewees, if they did not understand them or expressed some doubt, or if their answers did not match the questions. When I found a topic that was interesting, or worth looking at in depth, further related questions were asked, which were possibly not included in the interview schedule. For example:

*Re: How did you maintain classroom discipline?*

*St: When I asked, 'Who can answer this question?' the pupils were very energetic and yelled 'ask me!! ask me!!' If this situation were to continue for a long time, the pupils would be distracted. Thus, my mentor told me that I should ask pupils to observe a rule when they wanted to answer a question: that is, to raise their hands instead of yelling or shouting. This worked. I avoided calling those who were yelling. Then the situation got better when pupils knew how they could be called to answer.*

*Re: So you just ignored those who were yelling and called the ones who raised their hands. That seemed to give a negative message to those who violated your regulations, and the pupils eventually knew what to do.*

*St: Yes, I only called those who raised their hands. As for those who did not raise hands but continued talking for a long time, I would remind them, saying*

*‘what should you do if you want to talk?’ So they understood and raised their hands. This is a good skill. It prevented my teaching from being disrupted.*

#### **4.5.3 Reflective journals**

Student teachers are requested to write journals at least once a week in the current teaching practice scheme, and are required to submit them to their university tutors every month. The tutors use the journals to understand how their student teachers are learning, and whether or not they are being properly supported in their schools, but they are not the main source for assessing student teachers’ performance. Student teachers usually follow a framework provided by their university tutors, and they are required to keep a record of their teaching practice at least once a week, describing the difficulties they encounter, their teaching activities, and their interactions with pupils, school mentors, and colleagues. The statements in the journals may be as short as two lines or a few sentences or paragraphs to describe their daily lives. Sometimes they can be longer, similar in form to an article. They provide insight into all aspects of the professional learning of student teachers.

Although I knew that student teachers were keeping journals during the fieldwork period, I did not originally plan to use them and I asked to see them only in March 2010, when I was informed that they were available. I made this decision because I had realised that the interviews could not provide sufficient information, and that the data contained in the journals would allow me to explore the findings from the interviews further. Therefore, the reflective journals had the merit that they could not have been deliberately written to match the findings of the interviews.

However, I had to remember that there is a power relationship between student teachers and tutors, which may affect the value of a reflective journal as a source of data, since student teachers may try to please their tutors by writing their journal in a way that would gain a higher mark. I discovered statements of this kind while I was analysing and processing the interview data, as discussed in the following chapters. As noted in Chapter 2, in the Taiwanese teaching practice scheme the evaluation of tutors is of great weight. Consequently, the analysis of reflective journals should be made with care, and they should be treated as a source of secondary data. For example, student teachers are not likely write something like ‘university learning is useless’. However, despite this concern about validity, reflective journals provide abundant information about how student teachers perceive their teaching in the teaching practice period. Almost all the events or perspectives discussed in the interviews were confirmed by the journals, although some inconsistencies were uncovered; in such cases the findings were examined further using other sources, or disregarded if this was not possible.

#### **4.5.4 The use of a critical incident technique**

In recent years, a critical incident technique has come to be regarded as a useful research method for exploring the learning experience of student teachers and of teachers at the beginning of their careers. A number of studies have looked at areas such as aspects of reflection, socialisation, or changes of belief, using a critical incident method to complement reflective journals and interviews (Beach and Anderson, 1998; Freese, 2006; Guo, Arthur and Lund, 2009; Rajuan, Beijjaard and Verloop, 2010; Conaill, 2010; Stran and Curtner-Smith, 2010).

In the current study, a critical incident technique was employed to examine findings both from the interviews and from the reflective journals. The term's original meaning refers to important turning points which influence practitioners' learning. Tripp (1994) notes that teachers may be forced to make immediate and appropriate judgements to deal with the contingencies they encounter in their classrooms. These situations can be regarded as being critical incidents. Angelides (2001) describes the analysis of critical incidents as a speedy technique to deal with qualitative data; it has become the main method employed in my case study strategy, and has been used to improve the understanding of school practice. As noted above, a number of questions in the interview schedules were used to identify student teachers' critical incidents (questions 5, 6, 7, and 12 of the stage one student teacher interview schedule; questions 4, 7, 8, 9, 14, and 16 of the stage two interview schedules, and questions 5, 7, and 10 of the mentor interview schedule).

There were two advantages to applying a critical incident technique to my interviews. First, I could identify specific examples which student teachers give from their teaching situations. This helped me understand how student teachers manage the situations they encounter and come to form a view of how and what they consider good teaching to be. A comparison of the stage one and stage two interviews also clearly revealed the stages of professional learning and changes of teaching perspective. Through this technique, factors which affect the learning to teach of students could be analysed. Second, the way the critical incident technique highlighted specific examples of situations relevant to what and how student teachers learn made it easier to corroborate general data from the interviews and reflective journals.

## 4.6 Ethical issues

Blaxter *et al.* (2001) identify four common ethical issues: confidentiality, anonymity, legality, and professionalism. Concerns over the first two issues mean that data collected should be used for the study only, and that individuals should not be identified when the study is written up. 'Legality' means that if a piece of research concerns illegal activities, the results must be presented publicly. In terms of professionalism, researchers should follow certain standards of conduct while undertaking the research.

The issues of confidentiality and anonymity particularly applied to the current study, and the means of collecting data adhered to the BERA Revised 2004 Ethical Guidelines, concerning the responsibilities to participants. I went through an ethical review with my original supervisor. After this, interviewees were informed of the research purpose and how interview data would be processed, and that their personal information was kept confidential. The interviewees all signed an agreement before taking part in interviews. Copies of it were retained by both me and the participant. They were allowed to withdraw if and whenever they wanted to and they were informed of this before their interview. A digital recorder was used to record the interviews and was approved by interviewees. The schools which participated in the study were kept fully informed. I ensured that the interviewees understood and agreed with the procedure and content of the interviews before they signed the agreement and the interviews began. The reasons for using the reflective journals as a research instrument were explained to the student teachers, and their use was agreed by them and by their university tutors and school mentors. Again, confidentiality was assured. The interviewees and questionnaire

respondents were invited to leave their contact information if they were interested in receiving a copy of the findings.

The recorded interviews were translated from Chinese into English. Although translations can never be exact, care was taken to retain interviewees' meanings as closely as possible. For reasons of cost and time effectiveness, I transcribed the interviews. The transcripts are available in both languages for purposes of scrutiny, should that be required.

#### **4.7 Data Analysis**

In terms of data analysis, I adopted Miles and Huberman's (1994) systematic approach, including data reduction, data display and conclusion drawing and verification. Data reduction is the process of selecting and abstracting data from qualitative-related data sources, such as interviews, observations and documents. The criteria to select data are associated with conceptual framework and are followed by coding or categorising data into clusters and themes. Then data is abstracted to a diagram form, as a data display. They are then ready for further analysis. Conclusion drawing and verification is the process whereby conclusions are confirmed and verified through emerging patterns and propositions and explanations.

When interviewing and reading the reflective journals, I found that the progress of teaching and classroom management were frequently mentioned. Many student teachers referred also to the original perspective in teaching, the struggle they encountered and how they overcome these difficulties in teaching practice. In addition,



the support of mentors and interactions with pupils were also evident in the journals and interviews.

Initially, following the suggestion of Miles and Huberman (1994), the transcripts were selected and coded into four themes that reflected the common development perspectives identified in the literature: idealist, struggling, dealing with difficulties, and moving on. An attempt was also made to identify student teachers' ideas in each theme, providing sub-codes for ideas about teaching, pupils, learning to teach, mentor support, classroom management, and their sense of self as teachers. The code of 'struggling' was replaced by 'survival stage' because it was the important stage which indicated that student teachers could become a successful student teacher in the period or gave up at the earlier stage. The code of 'dealing with difficulties' was subsequently renamed the 'tactical stage', since this name more appropriately reflects the immediate learning experience of student teachers at this stage, as they seek, and are familiar with, teaching skills and approaches. Furthermore, 'moving on' was substituted for 'strategic stage' because I intended to stress the differences between those who stayed at learning tactics and those who reflected on theories and develop personal teaching perspectives and tailor their teaching with the understanding of pupils' dispositions.

#### **4.8 Conclusion**

In this chapter I have described how the research was designed, and how the data was collected and analysed. 'Semi-structured' interviews were the main method used to collect the data, which related to the feelings, perspectives, and beliefs of student teachers. The same approach was applied in interviews with mentors, with a view to

providing information to corroborate statements made by student teachers in the two-stage interview. Data from reflective journals and an analysis of critical incidents were used to examine interview findings and to confirm the validity of student teachers' viewpoints as expressed in the two-stage interview. As regards ethical issues, the confidentiality of the interviewees and respondents was preserved, and the necessary agreements were signed by participants before the interviews commenced.

The research design addresses my two research questions and data collected provide evidence for answering these research questions. The first research question, concerning the factors which influence the learning to teach of student teachers, can be identified in the data collected through these three data collection methods. The data collected from the two-stage interviews address my second question. The first interview stage provided me with information about how student teachers leave behind their original teaching beliefs as they face the reality of the classroom by the impact of the factors identified in the first research question. The second stage interview, which took place at the end of the teaching practice period, provided me with information about how student teachers learn teaching skills and tactics during their teaching practice and the role the factors play in this process. This information answers my second research question. This data is further triangulated with data from the perspectives of mentors, with the critical incident technique used in student teachers' interviews and with the reflective journals. Thus the interpretation of the data can be verified by the examination from three different routes of student teacher data and from the perspective of mentors on the process of learning-to-teach of student teachers in teaching practice period - this addresses the validity of the study. The application of this research design may acquire the same result in different context. In terms of reliability,

other researchers may achieve a different interpretation from mine; however, I am assured that they will achieve similar data as me, once they conduct the study with the same methodological perspective and ways of data collection.

If I were able to take this research further, I would do it slightly differently. The questionnaire survey, which was conducted at the beginning of the research but afterwards discarded, would be replaced by classroom observation, and the reflective journals would be implemented in the same way. Although the data I collected is sufficiently rigorous to answer the research questions, I believe that the experience of two or three classroom observations would have provided empirical evidence in this area of research, because they would give me direct experience about how student teachers teach during their teaching practice period.

The research process provided me with a wealth of data. The factors that affect learning and teaching are identified in Chapter 5. How these factors influence the learning experience of two student teachers and of a further eighteen student teachers will be presented in Chapters 6-9. The first case study, discussed in Chapter 6, concerns Lin, an undergraduate student teacher, who received teacher training in a university institute of education. This is one of two routes into teacher training in Taiwan. Chapter 7 tells the story of Zhang, an undergraduate student teacher from a teachers' college. This is the other teacher-training route. It should be noted that there is no significant reason why Lin's story is analysed first. In Chapter 8, I will briefly introduce the background of the other eighteen student teachers. Finally I examine how all twenty student teachers learn during the teaching practice period and how these factors affect their learning in Chapter 9.

## **Chapter 5**

### **Factors which influence the learning and teaching of student teachers**

In this chapter, the factors that influenced the learning and teaching of the student teachers will be determined by means of an analysis of all twenty student teachers. I considered from the data that there were three main factors and three minor factors. The data suggest that the support provided by mentors, school leadership and dispositions of student teachers are the three most crucial in student teachers' learning to teach during the teaching practice period. Statements will be provided to support this perspective. All these lead to the revision of the model that I demonstrated in Chapter 3 and the new model will be developed towards the end of this chapter.

#### **5.1 Instructing and teaching styles of mentors**

The student teachers spent most of their time teaching and learning from mentors during the teaching practice period. Also, the mentors had the power to judge whether or not the student teachers would pass or fail after observing their teaching. Thus, it can be seen that their perspectives on teaching and learning had a great influence on the student teachers, who may have had differing teaching experiences based on the learning-to-teach and teaching perspectives of their particular mentors. Three types of mentors can be identified from the findings of this empirical study: authoritarian, hands-off, and educative. Each is here discussed in turn.

When supervised by authoritarian mentors, student teachers are required to follow their mentor's instructions strictly. Some of the mentors are concerned that student teachers' lack of teaching experience may delay the progress of their teaching and thus affect

pupils' learning. This may lead to pressure being exerted on classroom teachers due to parents' concerns. Mentors may even sometimes interrupt the teaching of student teachers if they see that the teaching is not progressing as expected and feel obliged to correct it. This may hamper the professional learning of student teachers because student teachers are discouraged to develop their teaching perspectives and are less likely step into strategic stage. In my empirical study, under the authoritative style of mentoring, the professional learning of student teachers stays either at tactical stage or survival stage, depending on the dispositions that I will detail in the next section (here the following examples show the impact of this mentoring style). In Ms Liu's case, for example, he was supported by an authoritative mentor and was forced to follow every instruction of his mentor:

*My mentor seemed to feel a strong responsibility to teach me how to teach. She always reminded me of what to prepare, how to run the class, and to be cautious... She stayed in the classroom most of the time, and sometimes I was really embarrassed when she disrupted my teaching. (Interview, 10 January 2007)*

When I asked Ms Liu's mentor how she supported Liu's learning to teach, her reply supported Liu's comments. This demonstrated that Liu's mentor never encouraged him to develop her teaching perspectives and reflect on theories. Rather, she demanded Liu exactly follow what he was told and emphasised that this was the best way to learn to teach:

*It's not easy to be a competent teacher. Liu needs to be trained step by step and I have to remind her how to behave and think like a teacher. I remember when I was a student teacher 30 years ago at teachers' college, the training was rather strict. They wanted student teachers to become good teachers, both in teaching*

*expertise and personality. I did my best to help her to become a good teacher and be a role model for her pupils. I hope this was useful for her. (Mentor interview, 10 January 2007)*

With the impact of this sort of mentoring style, Mr Liu stayed at the tactical stage even though he had been diligent in learning how to teach in the teaching practice period. At the second-stage interview, when asked for his/her experience during the teaching practice period, he answered,

*It seems that learning-to-teach is mostly concerning the familiarity of how to efficiently use teaching tactics when you are teaching. Even though my mentor is strict, I consider I learn a lot during teaching practice period. (Interview, 10 January 2007)*

A hands-off mentor, by contrast, rarely provides advice or suggestions to their student teachers. Contrary to mentors who are strict, hands-off mentors may be accused of neglecting their student teachers and of failing to supervise them. Reviewing the cases I investigated, student teachers who had this sort of supervision usually stay at either surviving stage or tactical stage. Mr Guo, who was supervised by a hand-off mentor, is a good example.

*Whenever I asked him to look over my teaching schedule, he always just glanced at it and said it was OK. He wasn't often in the classroom when I was teaching, so he didn't give me feedback and discussion after my teaching. (Interview, 10 January 2007)*

He also gave an example to illustrate his learning and teaching experience:

*Sometimes I was happy to have this type of supervision because I could teach whatever I wanted. On one occasion, I had a Chinese session to teach. I rarely prepared and taught it as I thought it should be. I stopped teaching in the class and had a chat until the session finished. I somewhat regretted this because I had not seriously considered the teaching, which was not good for my pupils and I learnt little from it. (Interview, 10 January 2007)*

Mr Guo's mentor was also interviewed. He indicated that his way of mentoring came from his own experience of learning to teach when he was a student teacher at teachers' college. His mentor seemed to insist on his way of mentoring without paying attention to Guo's needs:

*Learning to teach depends mostly on the learners themselves. Mentors act as counsellors who take charge of the learning. I told Guo that he could come to me when he had a problem. I respected his teaching and considered that he should be responsible for his learning, so I chose not to intervene too much in his teaching. (Mentor interview, 10 January 2007)*

Mr Guo was a practical person and just wanted to go through the teaching practice period without any trouble. Thus he did not care about his teaching and was happy with the mentoring of his mentor, who did not appear to care about his mentee's teaching. Even at a later teaching practice period, I did not perceive any improvement in his statements when I attempted to elicit his perspective about teaching and considered that he was still at the survival stage even though he did not feel he was still struggling:

*I learned nothing from teaching period and just taught what I wanted..... You need to treat pupils well and they won't make any trouble for you. Teaching tactics make no sense to me (Interview, 10 January 2007).*

Educative mentors usually have more discussions with their student teachers while giving them sufficient space to perform their teaching. They are open-minded and sympathise with the situations student teachers encounter. They allow student teachers to make mistakes when they are teaching and discuss it with them afterwards. They do not expect them to follow what they say strictly. Ms Chen explained:

*Basically, she respected my decision, but sometimes she gave me suggestions; for example, giving pupils more chances to discuss what I had just taught them. She found that I spent most of the time lecturing in class and didn't give pupils time to exchange opinions and digest the whole content. My mentor enabled me to learn by trial and error. (Interview, 27 December 2006)*

Educational mentoring significantly influences the professional learning of student teachers. In my empirical study, with support of educative mentors, student teachers reach either the tactical or strategic stage. In Chen's case, she started to reflect on her university and to develop her own teaching perspectives:

*My mentor encouraged me to reflect on my university study..... The teaching practice just confirmed what I had learnt at university. Concern for learners played an important role in teaching. In terms of teaching, the ability and the needs of pupils should be taken into account when preparing teaching materials and applying teaching skills. With regard to classroom management, understanding pupils' characteristics helped me to apply teaching skills or group pupils in the class efficiently and properly. (Journal, 10 January 2007)*

## **5.2 Disposition**

The dispositions of student teachers affect how they relate to others at their schools. This in turn determines whether student teachers can socialise smoothly and feel confident in their teaching and then begin to develop their own personal teaching



expertise. It was found that student teachers whose teaching experience was successful generally have four personal characteristics, which, to a certain extent, help them to progress smoothly through the teaching practice period. These characteristics are: empathy, responsibility, diplomacy and flexibility. These four characteristics are here analysed from the interviews, reflective journals, and critical incident statements of seven student teachers who reached the strategic stage during the teaching practice period. It shows that the dispositions of student teachers impact on their professional learning in the teaching practice period. I found that student teachers with four characteristics tended to achieve the tactical or strategic stage.

### **5.6.1 Empathy**

Student teachers who have an empathetic personality tend to sympathise with the people around them and they approach their pupils with the same attitude. I noted earlier that the process of behaving as a teacher involves the care of pupils. Thus, student teachers with this sort of personality are more likely to adjust their teaching to the needs of pupils, which is part of the professional learning of student teachers. They are likely to be more patient and tolerant when dealing with the misbehaviour of pupils. In Mr Li's reflective journal, he recorded how he dealt with a rebellious boy in the classroom:

*I remember when I glanced at him, he swore at me. I was quite surprised by this behaviour at his age in the beginning, but it happened again and again. I considered that he might be unhappy for a reason, so I asked my mentor, who told me that his parents were divorced and he lived with his grandpa, who didn't have enough time and energy to take care of him. That was why he behaved like this, looking for someone to pay more attention to him. (Journal, 11 November 2006)*

Ms Chen remembered an event in which she attempted to resolve a conflict between pupils:

*Today there was a dispute, and I knew who had caused it. He usually likes to shout at other friends, even if there is no reason, and this is the main reason for disputes. Actually, he is a nice boy if you understand more about him... I explained to the other pupils and asked him to speak the same sentences in a different way. Then all the misunderstanding was cleared up. (Critical incident, 11 October 2006)*

During an interview, Mr Wang mentioned how he taught an under-performing pupil how to calculate after class:

*I knew she was clever, because she responded quickly to any question I asked her, but she was easily distracted, and that was why she couldn't learn well. I asked her to repeat loudly after me the instructions I gave her to answer this question, helping her to concentrate on the study materials, and then I asked her to do what I just did. (Interview, 22 December 2006)*

His mentor, Ms Yang, said that Wang cared a lot about the pupils. He spent a great deal of time and energy understanding pupils and designing suitable teaching schedules or providing enough assistance for pupils to learn:

*Wang worked hard to help his pupils to learn. He attempted to understand their dispositions and design suitable teaching schedules. Sometimes he voluntarily helped pupils to review the teaching materials and make rapid progress. In addition, he was aware of how pupils felt and what they had learnt from his teaching. (Mentor interview, 22 December 2006)*

### **5.6.2 Diplomacy**

Successful learners usually have a good relationship with their mentors, other senior colleagues and pupils. Their good communication skills help them to become more easily accustomed to the school environment and to exchange opinions with their peers and senior colleagues. This enables them to learn how to teach from others' teaching experience, to reflect on their own teaching methods and then to develop their personal teaching expertise. Good relationships with pupils help them to understand more about pupils' needs, so that they can achieve better classroom management. Ms Lin showed her diplomatic potential during her teaching practice period. She liked to talk with pupils, build good relationships with them and understand what they were thinking:

*I like to talk to my pupils and understand how and what they are thinking. We talk about their idols or the albums released recently. Also, pupils like to share their school and family lives with me... They sometimes complain about being treated unfairly or tell me that some pupils have said something bad about them behind their backs. (Critical incident, 7 January 2007)*

Mr Wang built a good relationship with his mentor and other senior colleagues, with a view to exchanging his own teaching perspective with others and to acquiring a teaching post in the school:

*Not only did we discuss teaching, but we shared our life experience. Sometimes we had dinner and took exercise together. She even invited me to her place... Also, it is good to build a relationship with other teachers if you want to teach permanently at this school. (Interview, 22 December 2006)*

Ms Li also mentioned that she usually talked to senior colleagues and exchanged teaching experience and life experience with them. She seemed to have built good relationships:

*Ms Wang is a good friend. She is older than me. It seems that we share some hobbies. We usually went shopping together, and she told me what her class was like today or recounted something interesting in her class. We also shared gossip. (Interview 23 December 2006)*

Li's mentor, Ms Huang, confirmed the statements made by Li and indicated that she also had a good relationship with the pupils in her class:

*I found that Li usually talked with other colleagues and got along with the pupils. In our discussions she usually mentioned what this or that teacher or pupil thought. She understood these people well by talking to them. I think she is well-suited for this career. (Interview 23 December 2006)*

### **5.6.3 Flexibility**

The flexibility of student teachers is shown in how they react to the unexpected behaviour of pupils or to teaching difficulties, and whether or not they can adopt the proper tactics to deal with different situations and different pupils. During an interview, Mr Li talked about his teaching situation:

*It was like a battlefield in the classroom. I had to pay attention to every reaction of the pupils and quickly respond to them appropriately. This depended on how well I could control the classroom and the pupils. I really enjoyed this process. My mentor told me that I had the right kind of personality and I did well in those weeks. (Interview, 27 December 2006)*

His mentor confirmed Mr Li's personality and praised him for appropriately dealing with different pupils by adopting the tactics he had learnt in university and schools. His mentor described him as being a natural teacher:

*Li is usually alert and is good at managing contingencies in the classroom. I have found him to be a natural teacher. He knows how to interact appropriately with pupils and changes his way of teaching and adopts other teaching tactics when necessary. (Interview, 27 December 2006)*

Several samples were provided in Mr Li's reflective journal, showing how he interacted with pupils and coped with classroom events:

*I found that dealing with disruptive pupils in class was not a problem for me. Maybe it was because I knew enough about the pupils and understood how to handle them. I got along well with them but they also respected me. I think they knew that I could find a way to handle any misbehaviour in the class. (Journal, 10 January 2007)*

Ms Zhang also has a similar character. She could find a way to deal appropriately with contingencies in the classroom, and she remembered a critical incident during her teaching experience:

*I remember that I was asked to teach the class next to mine. This happened unexpectedly and I didn't have enough time to prepare my teaching material, so I followed the way my mentor taught the same subject. I asked the pupils to read the article out loud, and then explained the meaning of the new words [Chinese characters]. I didn't forget to connect the words to pupils' experience and this made the session more active. The pupils were happy with my teaching and I was sure they had learnt well in the session. I considered this to be one of my successful teaching experiences. (Critical incident, 23 December 2006)*

Ms Chen recorded a similar situation in her reflective journal:

*Today, I was praised by my mentor for my teaching in the classroom. She said that the methods I employed in class were great and helped pupils to understand the concept more efficiently than using the teaching plan. Indeed, at that*

*moment, it occurred to me that I could connect the subject to their life experience, the way my own primary school teacher did. (Journal, 15 January 2007)*

Chen's mentor, Ms Ding, also noted that Chen could manage classroom events by using the correct tactics for a situation:

*I think she can use body language, eye contact, or teaching skills in the right situations. This shows that she can grasp well what happens in the classroom and can continue teaching smoothly. (Mentor interview, 27 December 2006)*

#### **5.6.4 Responsibility**

Student teachers who feel the responsibility of teaching tend to look for useful material for pupils themselves and are more committed in their teaching careers. This characteristic makes student teachers more likely to concentrate on their professional learning and improve their teaching expertise.

Ms Chen described in her reflective journal her concept of being a teacher, and what she would do during the teaching practice period:

*I consider that a teacher should take care of all their pupils and do their best to improve the way they learn. It was a tough day today because my teaching wasn't good enough, so I stayed in the classroom after class and helped the pupils to review the materials they had to learn. (Journal, 14 January 2007)*

During an interview, Ms Fu mentioned that she spent much time preparing teaching materials when she was in the second stage of the teaching practice period:

*It seemed to me that teaching with the teaching manual wasn't very efficient. Pupils didn't seem to accept this way of teaching. I had to look for another way, and it took me a lot of time to consider what to do. I searched the internet and several books to find suitable teaching skills or tactics, modified them slightly according to my teaching needs, and made sure that my pupils could accept them. Teaching is quite a tough job if you take it seriously. (Interview, 7 January 2007)*

Mr Wang considered that enabling every pupil to learn well was the most challenging part of his teaching practice. He mentioned this in his reflective journal:

*It is difficult to take care of every pupil. With a view to achieving this goal, you need to understand every pupil and make sure he or she can learn well. Thus, I reviewed my university learning and applied it to my teaching. Seeking suitable ways to teach pupils has been a challenge for me since the start of the teaching practice period. I also consulted my mentors, my classmates, and senior colleagues, to see if they could give me better suggestions. (Journal, 14 January 2007)*

Wang's mentor, Ms Yang, also confirmed that Wang was a responsible teacher and carefully considered his teaching materials before each session:

*He was serious about each session and prepared well; for example, asking other teachers or student teachers for suggestions. We usually had a long discussion about the arrangement of the sessions, and thought about which arrangement was better for the pupils. (Mentor interview, 18 January 2007)*

### **5.3 School leadership and senior colleagues towards teaching practice**

School leadership during the teaching practice period plays an important role in the learning-to-teach of student teachers. At the end of the teaching period, their teaching beliefs, skills and approaches became the materials which student teachers reflected

upon. In this way they further improved and developed their teaching beliefs. Ms Li identified that her teaching benefited from the support of school.

*I was interviewed by a headteacher and asked what kinds of support I needed for my teaching. The headteacher attempted to understand what I need and assigned me to a mentor who was suitable to me. He also gave me the time to prepare teaching materials and assured me that I could learn efficiently from the teaching of my mentor and other senior teachers. The senior colleagues paid attention to my teaching and gave me help when necessary. I appreciated very much the help from the headteacher. (Interview, 8 October 2006)*

Thus Li achieved the strategic stage towards the end of the teaching practice period. In the second-stage interview, she mentioned the support from school leadership encouraged her to make reflections on theories she learned from universities and this helped her reach the strategic stage,

*My mentor and senior colleagues all encourage considering the theories and updated literature in their teaching and asked me to develop my teaching perspectives. Improving teaching and reflecting on new literatures seemed to become the beliefs all the teachers in this school advocated..... Although the theory was not useful at the beginning, it proved itself as time passed. Having become familiar with the teaching life and then reading through the material, some stuff was quite reflective. It occurred to me that my teaching still needed to be improved. (Interview, 23 December 2006)*

Li's mentor, Ms Chen, mentioned that the school management gave Li much support during the teaching practice period. She agreed that Li's learning had certainly benefitted from this, and that this is an important factor in student teachers' learning to teach:



*I considered that the support of the school was important for the learning of student teachers... I remembered that when I was teaching in another school, the school management team didn't pay any attention to student teachers. Student teachers were just cheap labour in the school and their learning was very limited during the teaching practice period. (Mentor Interview, 27 December 2006)*

Although what student teachers should do or teach is regulated, how those regulations are applied in school depends on the school leadership. This is considered to be a factor which affects the teaching of student teachers because some student teachers mentioned that they had been assigned other tasks, so that they did not have enough time to prepare their teaching practice. Schools which do not pay much attention to teacher training tend to consider student teachers as cheap labour or as substitute teachers and neglect their teaching and learning needs. For example, Ms Yeh was unhappy that she was being given too many administrative jobs demanded by school leadership, so she could not concentrate on her teaching practice and was still struggling in knowing how to teach. She stayed at the survival stage:

*I feel that school management treats us like cheap labour. We have to do many things that are unrelated to teaching, like moving heavy stuff, or typing text on computers. Most importantly, my teaching and learning are seriously affected by these things..... I have no ideas of how to teach. My friends told me that I could learn from my mentors about the tactics he used in classroom. It looks to work when he was teaching or when he was in the classroom. But it didn't work when I was teaching. I told to my mentor, but he didn't think it was a problem, and could be improved in the near future. However, it is near the end of the period. I feel quiet depressed (Interview, 22 December 2006)*

Ms Huang, Ms Yeh's mentor, said that the school management team needed to care about the learning of student teachers. They should be given more time to prepare and practice teaching:

*I found that my school didn't give enough time to student teachers. It assigned student teachers too much work so that they couldn't focus on teaching. Schools should help student teachers to do more teaching. (Interview, 22 December 2006)*

In the following three sections, I will demonstrate the minor factors that influence the learning of student teachers: pupils, parents and peers. These three factors are regarded as having less influence than the three already described on the stages that student teachers achieve during the teaching practice period.

#### **5.4 Pupils' response to teaching**

The largest group that student teachers usually come into contact with during the teaching practice period consists of pupils. Pupils are not just taught by student teachers. They help student teachers to understand how to teach and to manage a classroom. The reactions of pupils towards student teachers' teaching are important clues for showing student teachers how to adjust and improve their teaching, providing direct feedback. This happened to Ms Wang, who gave an example of how pupils affected her teaching:

*For instance, when I wanted my pupils to memorise the multiplication table, I started by asking them to recite the table as a class, then in groups, and finally individually. While they were memorising it, I paid attention to the shape of their mouths, which helped me identify who wasn't doing well. If some pupils' mouths didn't follow the same shape as the others, I knew they hadn't practised enough. I also tried to let them recite from the middle of the table, but found they*

*could not do it well. Thus I knew these were their weak points and I should help my pupils deal with them in class. (Interview, 3 January 2007)*

Ms Wang considered the reactions of pupils to be important feedback on her teaching. When she found content that pupils felt confused about or with which they seemed to be unfamiliar, she knew that this was what they needed to practise more. In the same vein, Ms Tu, during the interview, indicated that pupils' emotions affected her teaching:

*Pupils' attitudes toward learning really affect my teaching. When you teach your pupils, you have to know their dispositions and then find a way to deal with them That takes experience and time. (Interview, 3 January 2007)*

This accords with the example she gave when I asked her to remember one situation from which she considered she had learnt a lot:

*The pupils in my class were usually naughty and rebellious. One day I asked a pupil to do class service as punishment for his misbehaviour. I reminded him to do it many times but he still disregarded my warnings. Finally, I was extremely irritated and forced him to complete the job... On one occasion, I arranged to teach the pupils in the class next to mine, and they behaved well and did what they ought have done. I wondered why those pupils were so disciplined... I considered this was because of the different dispositions of pupils. In my class, I should remind my pupils many times what they should do, and should adopt more strict rules against their misbehaviour, but in the class I temporarily taught, this wasn't necessary. (Interview, 3 January 2007)*

Ms Tu's mentor, Mr Sun, also indicated that the teaching of student teachers was influenced by the pupils:

*Tu was worried about her teaching being accepted by the pupils. She took note of their reactions and tried her best to tailor her teaching to their needs. She*

*always discussed the pupils in the class with me after the sessions. (Mentor interview, 3 January 2007)*

Ms Yeh's mentor, Mr Huang, also mentioned that pupils' interactions impacted on Yeh's teaching:

*She cared about the reactions of pupils and wondered whether her teaching was having the results she expected. She also asked me for tactics which could make pupils learn more efficiently. (Mentor interview, 22 December, 2006)*

### **5.5 Educational beliefs of parents**

This section describes the ways in which parents affected the teaching behaviour of the student teachers. In Taiwan, most parents care a great deal about their children's performance in school. They usually contact teachers through parent-teacher communication books and some parents may come to the school to see their children learn or to express their concerns about their children. Student teachers may be forced to change their teaching style due to pressure from certain parents.

Generally, parents have little direct interaction with student teachers in Taiwan. The first person parents ask when they want to know about their child's performance at school is the class teacher. Ms Guo explained that 'I don't usually interact with parents directly. They usually look for my mentor.' Nonetheless, parents still put a great deal of intangible pressure on student teachers' teaching. During the interview, Guo indicated this:

*The school term examination is coming. I am afraid that the pupils have not learnt very well what I taught them. To be honest, I feel frustrated when I find unsatisfactory results from the tests I randomly hold in class. Even if my mentor*

*doesn't care about it, parents may have a different view... Despite the fact that it is commonly agreed in Taiwan not to put too much emphasis on pupils' academic performance, in reality it is really difficult not to think about that. Traditionally, parents expect their children to perform very well academically. (Interview, 14 January 2007)*

Mr Li also noted that most parents respected the teaching of teachers and would do anything to support the learning of the pupils in class. However, some parents were stubborn and selfish, insisting that their pupils were always right and should receive more recognition. This really disturbed his teaching. He indicated this in his reflective journal:

*One parent was quite annoying. She wrote a lot in the parent-teacher communication book and sometimes went directly into the classroom and told pupils 'you should sympathise with him'. This behaviour seriously affected the relationship between her child and his classmates and the child was isolated from the other pupils in the class. Her over-concerned protection and intervention had a counter-effect on the learning of her child. (Journal, 27 December 2006)*

Sometimes student teachers cared about the opinions of parents, and changed their style of teaching in an attempt to avoid being criticised. For example, Ms Yeh and Ms Chen mentioned:

*Once I had to take charge of a music session, in which I had to teach the pupils how to play the flute. I was ignorant about music and I couldn't play it. In my school, parents were frequently seen passing through the corridors by the classrooms. So I didn't dare show a video to the pupils; instead, I asked them all to play the flute many times because they needed more practice. So I finished the session safely. (Ms Yeh's critical incident, 22 December 2006)*

*Some parents liked powerful teachers, but not those who made them feel they couldn't control the class. I found that a parent was coming one day, so I had to show my authority. For example, I had to be stricter with pupils who were naughty, but I knew that as soon as the parent left, I would do what I normally did. (Ms Chen's critical incident, 27 December 2006)*

Some parents worried about their children learning under the instruction of student teachers. They considered that student teachers did not know how to teach correctly. Also, their children had been accustomed to the teaching style of their class teachers. Ms Tu and Ms Liu stated in their reflective journals that:

*Today I taught pupils how to tell the time from a clock. One of my pupils was clever but became easily distracted. When he got home, his mother tried to test him on what he had learnt and found he couldn't tell the time. She was worried and came to school to ask whether or not I could teach. (Journal, 3 January 2007)*

*When school finished, some parents came to take their children home. At that moment, some pupils were drawing on the blackboard, which was banned, both by the class teacher and me, and this was understood by the class pupils. However, when the parents were in my classroom and didn't scold their children, I pretended nothing was happening and didn't stop them. But when the parents left, I scolded the pupils. I wonder why I couldn't stick to my principles all the time. (Interview, 10 January 2007)*

Some parents intervened in teaching because they considered that they knew more about teaching than class teachers. Sometimes they came into the classroom or wrote their opinions in parent-teacher communication books. Ms Yang and Mr Wang stated that:

*I was quite embarrassed when she (a parent) came into the classroom and showed me how to teach and gave an illustration. I had talked to her several times and my mentor promised her that there was absolutely no problem with my teaching, but she totally dismissed my opinions and insisted that she was right. Finally, we asked the head-teacher to cope with this situation. (Ms Yang's interview, 22 December 2006)*

*She usually forgot to do her homework, so I told her I would punish her, but she still didn't do it. I was unhappy, but her mother came with her and appealed to me not to punish her. Of course, I had to let her go and wondered why her mother spoiled her. (Mr Wang's interview, 7 January 2007)*

The mentors also confirmed that parents' perspectives impacted on student teachers' teaching. For example, Mr Liu, Ms Tzeng's mentor, noted that some parents often asked Ms Tzeng how their children were performing and wanted her to give them extra attention:

*I think she was certainly disturbed, but this is unavoidable if she wants to be a class teacher in primary school. These parents are just worried about their children, but they are annoying and sometimes they may strongly affect your teaching. (Mentor interview, 14 January 2007)*

Ms Peng, who mentored Ms Fu, also indicated that parents may affect the teaching of student teachers. They argue with student teachers or class teachers about how to teach, but sometimes their arguments are not practical. This certainly makes teaching more complicated:

*Some parents of the children in my class are quite annoying. This shows that they care a great deal about their children, and I am pleased that we have the kind of parents who can help the pupils to learn. But sometimes they intervene*

*excessively in my and Fu's teaching, and this becomes difficult.* (Mentor interview, 7 January 2007)

It seems that Taiwanese parents care a lot about student teachers' ability to teach. Having found that their children were being taught by student teachers and were not learning well, they more quickly blamed the student teachers than the class teachers and gave student teachers less space to make mistakes. They regarded student teachers as being teachers rather than student teachers, and wanted the best teachers to teach their children.

### **5.6 Teaching beliefs among peers**

Student teachers who teach at the same school, or used to study in the same class at university, usually communicate with each other to exchange teaching experiences, or for emotional support. This provides an environment for student teachers to socialise at the beginning of learning to teach, and reflect on personal teaching experiences in the latter stages of teaching. Because they are in a similar situation, they share their teaching skills or experience, or how to cope with difficulties in school. This also provides an opportunity for student teachers to consider and develop their personal teaching beliefs.

It was found that, at the beginning of teaching, communication between student teachers and their peers focused on sharing personal experiences and releasing pressure. Ms Liu indicated that her teaching benefited from talking with other student teachers in her school:



*Last week I started to teach... I met with the student teacher in the class next to mine and talked with her. She said she had started to teach social science the day before. I asked her how it had gone. She said her mentor suggested she walk around the room when pupils were having a group discussion, and pay special attention to those who were usually quiet in the group. I thought this was a good idea and I would try it next time I grouped pupils in my class. (Interview, 10 January 2007)*

I also found a similar statement in her reflective journal. Communication with peers had become an important source for Ms Liu to acquire useful teaching skills:

*Tomorrow I have to teach. Today Ling shared her experience of teaching for the first time with me. It was helpful. It seemed that her first teaching session hadn't gone well. She told me I shouldn't have too many unrealistic expectations of teaching. (Journal, 5 January 2007)*

Ms Liu's mentor, Ms Chen, also noted that peers helped Ms Liu to relieve her pressure by exchanging teaching opinions:

*I found that she usually talked to other student teachers and they exchanged their teaching experiences. During our discussions, she sometimes mentioned things her friends had talked about and what other student teachers had mentioned. That was quite helpful for Chen. I believe they had private conversations and this could relieve stress during the teaching practice period. (Mentor interview, 10 January 2007)*

Mr Guo, who was a student teacher at a different school from Ms Lin, recounted his teaching experience in school at the beginning of the teaching period:

*Tu [one of the other student teachers in Guo's school] told me about his mentor's suggestions. He said that his mentor praised pupils more often, so that they could be more motivated to learn. At the same time, she wanted him to*

*maintain discipline so that the pupils could learn properly.* (Interview, 10 January 2007)

Communicating with peers also works well to relieve the intensity of the pressure, especially at the beginning of teaching. Ms Yang indicated that talking with student teachers was very useful for this:

*I was getting really anxious when my first time to teach was approaching. I asked Fang what her first time to teach was like. She said that it wasn't wonderful, but acceptable. It was OK for her first-time teaching. I asked her what she meant by 'OK'. She said, 'Just prepare well and follow what you have discussed with your mentor. You can't predict and control how all the session will run, because you haven't done it before.' It was a reasonable point!!* (Interview, 22 December 2006)

Yang's mentor, Ms Chen, also said that Yang had benefitted a great deal from interaction with other student teachers:

*She certainly needed peers to talk to her. I remember that she was a bit anxious at the beginning of teaching, so I asked her to talk to her friends, and to share teaching experiences with classmates in other schools. This seemed to help. I believe that her pressure was relieved and she had some good suggestions from her friends.* (Mentor Interview, 22 December 2006)

The impact of peers on student teachers' learning to teach became stronger in the latter part of the teaching practice period, especially when they exchanged teaching perspectives. The exchange of teaching perspectives provided student teachers with better opportunities for reflecting on their personal teaching perspectives. Ms Li mentioned this during the interview, when she was asked to remember the important events of her learning experience:

*We were together yesterday and shared some jokes with each other. I asked one of the student teachers why he found it so easy to laugh and had such a bright smile today. He said he had been in a bad mood in the morning. So I asked him what had happened. He said he had been spat at by a pupil. When we were chatting, we usually talked about what had happened in class, so I asked him why the pupil had done this. He said that maybe it was because the boy was autistic. We regularly got together and explained what had happened to each other. (Critical incident, 23 December 2006)*

Ms Li also made statements in her reflective journal. The exchange of teaching perspectives enhanced her motivation to further reflect on theories and to re-form her own teaching judgements. For example:

*I found that it was useful at this time to share my teaching experience with my classmates in workshops. We could discuss our teaching perspectives with each other and decide how they might work in the classroom. The discussion also included how to use our teaching experience to examine our university learning. (Journal, 13 January 2007)*

## **Conclusion**

Six factors that help or hamper the professional learning of student teachers have been identified in this chapter. They are

1. the teaching and supporting styles of mentors
2. student teachers' dispositions
3. the attitude of leadership and senior colleagues toward teaching practice
4. the dispositions of the pupils
5. the educational beliefs of parents
6. the teaching beliefs of peers

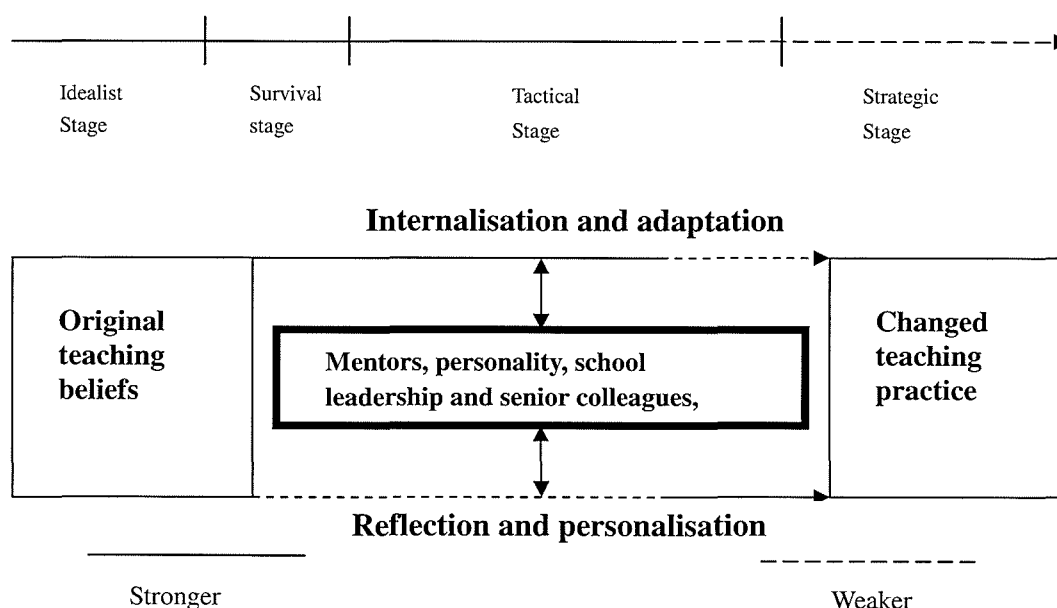


Diagram 5.2 The model of professional learning of student teachers during teaching

The six factors showed in this chapter have altered somewhat the model in Chapter 3. The specific influence of mentors, student teachers' personality, school leadership, peers, senior colleagues and pupils' parents have emerged as the key themes. The support from mentors, senior colleagues and school leadership and interactions with pupils help student teachers improve their understanding of pupils. Then in the strategic stage student teachers may design their teaching with this sort of understanding. This can be identified as the growth of pedagogical content knowledge and part of professional learning in the early teaching career of student teachers.

The main difference in recent model is that I replace previous 'socialisation, reflection, developmental perspectives and subject matter knowledge' with six factors, which I identified in this chapter. . The model remains partly true, in that some of the student teachers do indeed appear to move from a tactical to a strategic approach. My empirical data suggests that 7 of the 20 reached the strategic stage, as shown crucially in 5.2, the sections 1 and 2 on mentoring approaches and student teachers' dispositions. However,

the distinction between the tactical and strategic stages may still be unsure and that this needs to be teased out. This will be explored at the end of Chapter 9, after reviewing two case studies and a cross-case study of remaining eighteen student teachers. Nonetheless, in this chapter, the statements I quoted in this chapter provide much insight into how these factors influence the learning of student teachers. Of the six factors, the influence of the mentors, combined with the student teachers' personalities, appeared to be the most important ones. The precise style of mentoring plays a crucial role in the learning experience during the teaching practice period, since good mentors understand how to facilitate the process of student teachers' learning to teach. To a great extent, the personality of student teachers influences their teaching and classroom management during the teaching practice period, most notably how they interact with their mentors. The attitude of the school management team determines the level of support student teachers receive. Peers and senior colleagues, with whom student teachers have conversations or exchange teaching perspectives, also have an impact on teaching and learning during the teaching practice period, as do interactions with pupils and parents. However, it is the combination of mentoring approach, student teacher disposition and supportive school leadership that enables student teachers to progress to the strategic stage. In the absence of this combination, student teachers may well progress. Nonetheless my evidence suggests that they are unlikely to get beyond the tactical stage or may stay floundering at the struggling stage. In the following chapters, I will show how these factors play into the learning-to-teach of two student teachers in their teaching practice period.

## **Chapter 6**

### **Lin's teaching experience**

As I suggested in the previous chapter, I found that seven of the twenty student teachers were confident in their teaching and were starting to consider combining the theories from their university learning about teaching with their practical experience. The two cases studies which I have selected from these seven are employed to illustrate the model I have developed in Chapter 5 from the original one in Chapter 3. Thus, the experience of unsuccessful student teachers, which do not match the model, will not be presented in detail, although the factors responsible for their unsatisfactory teaching in the teaching practice period will be further investigated. The two case studies are discussed in this and the subsequent chapter, and in Chapter 9 as part of the cross-case study. The first is a student teacher from a university institute of education, while the other is from an education-related department. All of the data presented in this chapter has been selected from the transcripts of interviews, including the use of critical incident techniques, and from the reflective journals, as relevant to understanding the learning experience of student teachers and the ways in which their approach to teaching has changed. In Chapter 9, the learning experience of all twenty student teachers will be reviewed, and I will look for common factors which influence their learning. In the current chapter, Lin's teaching experience during her teaching practice will be described.

Lin's teaching experience is taken from the data provided by her two-stage interviews and the reflective journal. The interviews were used as the main data source, while the reflective journal provided a great deal of additional interesting information. The material was originally in Mandarin, and translated into English by me. The original

transcripts are available in footnotes or as digital recordings. The first interview with Lin was held on 23 October 2006, when she had just completed a one-month teaching observation and had experienced just over three weeks' teaching practice. The second interview took place on 14 January 2007, when she had almost finished her teaching practice, and two weeks before the end of the first semester. Her story reflects how she reacted to the setting of her teaching practice and how she developed her teaching expertise.

I will present Lin's story in six sections, in which how six factors affect Lin's professional learning and the growth of pedagogical content knowledge in teaching practice period are demonstrated. The school environment is described in Section 6.1, with a view to providing background about the context in which Lin taught. Section 6.2 presents Lin's personal background and how this has an impact on her teaching beliefs. Lin's learning experience is described in Sections 6.3 to 6.6, encompassing struggling with teaching practice, looking for useful teaching skills and strategies, focusing on the understanding of pupils, and reflection on teaching performance. The latter two topics are particularly stressed by Schuman in his term 'pedagogical content knowledge'. Her name has been changed to protect her identity.

## **6.1 The school environment**

When I came to Lin's school, the management provided me with a brochure which explained the school's context. Lin taught in a middle-sized school in Northern Taiwan, in a city with a population of more than 400,000. The school is located near the city centre, and has more than thirty classes and over 1,000 pupils aged between six and twelve. It is a relatively new school, in terms of the length of time since it was

established (in 1997) and the average age of its staff is young at thirty-one years. The school buildings all have four storeys, and every classroom contains a room where teachers can review pupils' homework and prepare teaching materials when they have a free period. It is also a place where teachers can have a rest. The school management is widely recognised for its excellence and thus the number of pupils has grown rapidly in recent years. The school's annual staff turnover is very low and the teachers are extremely enthusiastic about teaching. The age difference between student teachers and mentors is comparatively small. This allows perhaps student teachers to communicate better with their mentors and with other teachers in the school.

A total of eleven student teachers were assigned to this school, most of whom came from institutes of education and education-related departments in universities in Taiwan. The head-teacher had recently been awarded a PhD and she welcomed having student teachers in her school. She also paid attention to recent research by educational academics and encouraged improvement in teaching approaches and skills.

Lin's mentor was Ms Liang, a 35-year-old graduate from a teachers' college in southern Taiwan who had almost ten years' teaching experience. Lin told me that her mentor was a good teacher, patient with her pupils and she usually encouraged Lin to apply her university knowledge to her teaching practice. Ms Liang's class was fifth-grade (aged eleven), with thirty-two pupils (fifteen boys and seventeen girls). Most of them came from middle-class families in the school's catchment area.

## **6.2 Personal background and pre-teaching belief**



Lin told me that she came from a rural background, and was the eldest child in her family. Since childhood, she had been considered to be intelligent by her family. When she entered nursery school, she could memorise 'San Zi Jing', the basic Chinese traditional classic, which was taught widely in private schools in China traditionally. She had three class teachers during her primary education, all of whom were considered to be good teachers. Lin remembered that her first one had been female, always smiling amiably, and therefore she regarded studying in school to be a happy event. She then had a male teacher, who usually encouraged his pupils and made them feel confident in their studies. Her third teacher was very serious, with a solemn countenance, which made him seem unapproachable. However, he was a good teacher, who usually helped his pupils to catch up with their learning over the weekend. He sometimes also held barbeques or played ball games with his pupils. When she was seven, Lin was sent to a cram school in the city to study essay composition, mental arithmetic, Chinese calligraphy, and English, which made other pupils at her rural school jealous, because they rarely had the chance to do that. The cram school experience also made Lin more independent than the other children in her family, because she had to take the bus alone to reach the cram school in the city. This early experience of being independent and developing a capacity to deal with things on her own meant perhaps that she had a problem-solving disposition, which influenced her attitude towards learning to teach.

Lin studied very hard during her junior high school period and was accepted as a student by the top-rated senior high school in the city. Her class teacher in her second and the third years impressed her, because he had an agreeable nature and treated his students with respect. Students felt both safe and challenged in the classroom. While being able to communicate freely and happily in the classroom, it was still a place to learn and to compete with classmates in examinations. Lin liked reading, and this was

mainly because of her teacher. She considered that she was lucky to have had good teachers in her student days, as well as many easy-going classmates. This combination made her even-tempered and gregarious. She said that she had never expected to become a teacher, and nothing related to teaching had ever appeared in her essay-writing since primary school. Also, her choice of a teaching career was a surprise to her family and friends. This was shown in her response in the first interview stage to a series of questions about her past teaching experience:

*My secondary school teacher told me that the person thought most unlikely to become a teacher in our class was the first to take up teaching (they indeed considered that I could never be a teacher). Also, my mother was against my decision, saying that I should consider my future. She implored me not to become a teacher when I told her I was applying for a teaching post.*

Religion was the most important motivation for Lin's decision to teach. Her sixth-grade teacher had a great influence on her personality, and this teacher had led her to Christianity.<sup>9</sup> Lin based her teaching image on her role model. 'Helping others is the source of happiness' seemed to be the way she saw teaching:

*I wanted to become a teacher, not because I was taught by bad teachers. Rather, I discovered from my sixth-grade teacher that I could spread the gospel and help many people to come to know Jesus, the Son of God. By knowing Him, people could be happy. I did it because I regarded it as being worth doing.*

It can be seen from these statements about Lin's background that she was a good academic student and her motivation to teach comes from her religion. This may have affected her way of thinking about teaching, including her preference for a

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<sup>9</sup> About 3.9%, of Taiwanese people (or 605,000) are Christian, which is regarded as minority religion in Taiwan. Over 93% of Taiwanese are believers of a combination of Buddhism, Confucianism, and Taoism (Wikipedia, 2010).

learner-centred approach, and for paying more attention to pupils' needs. Lin attended teacher training in the institute of education at her university. Although her teaching career started in her second year of university, at that point teaching was only one of many choices, and she did not consider it to be her first choice for a future career. Lin remembers thinking that her teacher training at university was 'funny but useless' in terms of teaching methods. However, because her major was mathematics, she felt that the teacher-training course was very interesting, and that the humanities subjects were a refreshing change from her tough mathematics course. Nevertheless, the training course simply involved the transmission of knowledge and some paperwork, without any interaction with students. Therefore, Lin found it difficult to manage the classroom when she began to apply her practical teaching skills. This is why she felt initially that university learning was useless. When asked about her university learning experience, she said:

*Nothing, I learnt nothing from university [about teaching]. But I learnt how to manage the classroom and employ teaching skills during classroom practice. I felt the teaching at university was ineffective because they only asked us to make some oral reports, or share our learning experiences. This didn't show us how to teach. Also, it is unimaginable to learn psychology in one semester.*

Lin did not value her university learning as being useful, because it did not give practical advice on how to teach or how to manage the classroom. This perspective may have changed slightly by the end of her teaching practice, since she stated that she was starting to reconsider the theories and approaches she had learnt at university. This attitude towards learning in university was not echoed in her reflective journal. I would suggest that this might be because she tried to avoid giving her tutors a bad image, since they had to review her journal.

That Lin's concept of teaching is derived from her religious belief is illustrated in her reflective journal, where she says that pupils should be carefully handled and treated well:

*Today I was assigned a task, taking charge of a class for three days because the class teacher had had an accident... I expect my teaching to make my pupils happy to learn and I hope to see them always smiling. The learning should be motivated, so maybe I can consult my mentor for some useful skills and strategies.*

Similar statements concerning Lin's teaching ideas at the beginning of teaching were also mentioned when her mentor was interviewed:

*...at that moment, I thought she would be a good teacher in the future. She was willing to treat pupils well and help them to study well. She told me it was teachers' responsibility to facilitate the learning of pupils... Pupils shouldn't be forced to study and it was inefficient for learning...*

However, her mentor also indicated that her teaching perspectives at that moment were idealist and not practical. Lin sometimes argued with her mentor concerning the teaching styles the mentor or other senior teachers' applied:

*After observing the teaching, we usually had discussions. She was critical about our teaching. She thought that pupils should be more carefully treated and teachers had to listen to pupils' voices more.*

Lin regarded forcing students to study without considering their conscience to be immoral. She believed that making pupils happy in their learning was the most important thing. She also considered that it was not necessary to reflect upon her

university learning when learning to teach. Her understanding of how pupils learn and the disposition of pupils showed that her beliefs about learning and learners were still immature. She simply wanted to behave like the teacher she imagined herself to be. However, this was unrealistic and she soon found that her ideas were unworkable.

### **6.3 Struggling with teaching practice**

Lin mentioned that her first practical teaching experience had taken her completely by surprise. She had to take charge of a whole class of seven-year-olds. Lin was assigned as a substitute teacher for the class for some sessions and this was not the class she taught with her mentor during teaching practice period. The reality of the classroom came as a shock. She described three aspects of the teaching practice which made her feel stressful. The first concerned how to present teaching materials to pupils appropriately. Lin was confused as to why such a simple thing should require so much time to teach and she appeared not to understand how to consider the needs of pupils in her teaching content. She gave an example when I used critical incident technique

*The addition [in fractions] was simple for me, but I didn't understand why it took more than 30 minutes to run the session... It was just something like 11 plus 15 equals 26.*

Controlling the teaching pace was the second aspect Lin found difficult. She confessed that she did not know how to arrange her teaching activities in this session: although she had planned a forty-minute teaching activity, it was completed in only thirty minutes. When asked to remember certain situations, she said she had felt more challenged during the earlier stages of the teaching practice period.

*Even though everything was properly arranged, I found I had problems with the teaching pace. Forty minutes of teaching activities were scheduled in my teaching plan, but they were finished in less than thirty minutes. I was then anxious in the final ten minutes, and didn't know what to do. I just had to stay on the platform until the end of the session.*

She also mentioned this in her reflective journal. Time-management was one of her concerns relating to teaching practice, and she attempted to find a solution:

*Today I taught them how to measure the degree of an angle. I took my bigger protractor, drew several angles on the blackboard and showed how to measure the angles. I did it three times and made sure everyone knew how to do it. It was simple. I was sure I had taught them well, but some still couldn't understand it. Also, it took only twenty minutes to teach all I had to teach. I filled up the whole session by asking the pupils to practise more. That wasn't the way I presented the lesson in my schedule.*

Lin's mentor also mentioned that Lin had this problem at the earlier stage of teaching and offered the support Lin needed when she felt she was experiencing difficulties:

*The teaching pace was the problem she suffered with at the beginning of teaching. She found that she usually finished the session earlier than she expected. Thus she discussed with me how to solve the problem*

The third aspect of Lin's difficulty concerned how to answer pupils' questions. Because of her lack of teaching experience, she found that it took more time to answer questions, and this sometimes led to class disruption. Thus, she considered that she should be better prepared for the sessions. This shows that Lin's teaching at this stage is beginning to be influenced by the reaction from her pupils, one of the factors noted in the previous chapter. She was asked to remember a specific situation which she felt had been particularly challenging:

*If students raised questions for which I was not prepared, I might have taken a long time to think about how to answer them properly, so that they could understand... However, it seemed that they were confused by my answer... I thought that if I could teach this unit again, I would know what their questions were like and be prepared to answer them.*

Lin's mentor similarly explained that, at the beginning of teaching, Lin had encountered some difficulties in teaching and classroom management. :

*Lin is a good teacher and knows how to overcome her difficulties step-by-step by herself. I don't need to particularly take care of her as she would come to me when she had problem..... I don't need to give her too much advice and instruction and she could do well. Just remind her that sometimes she could come to me when she needs help. I remember that we had a discussion at the beginning of her teaching, after a session which she considered to have been very unsatisfactory, especially as regards classroom discipline and pupils' understanding of teaching materials. She mentioned the improvements she wanted to make in subsequent sessions and gave me a to-do list and asked me for my suggestions...*

From this statement, Lin's independent disposition can be identified and her mentor knew that and allowed her to develop in her own way, with a little support from her when Lin requested. This is a good illustration of the power of a combination of student disposition and the appropriate mentoring factors. At this stage, Lin attempted to use her original teaching beliefs in her teaching, but she soon encountered difficulties, which made her confused as to how to teach. Her pedagogical content knowledge had not been adequately developed at this stage and it can be seen that she still shows no idea how to tailor her teaching to pupils' needs. She is independent and this led her to look for possible solutions for the situation without any hesitation, even though she was still confused about how to teach properly. Her mentor also provided the support when

she needed it to get through this survival stage. She behaved as a teacher who was beginning to doubt her original teaching beliefs because she was struggling to apply her beliefs effectively to her teaching.

## **6.4 Looking for useful teaching skills and strategies**

Lin began to look for solutions to improve her teaching. She considered that imitating the teaching skills or strategies of her mentor, as well as teaching according to the instructions in published teaching manuals, might be a way to improve the situation. In addition, order had to be maintained in the classroom so that her teaching could be effective.

### **6.4.1 Imitation of teaching skills and approaches**

Lin considered that good teachers are familiar with how to apply teaching skills or teaching approaches. She copied her teaching skills from Ms Liang, hoping to create the same happy and productive classroom atmosphere.

*Lin: Sometimes, when a pupil asked a weird question that I didn't know how to answer, I wondered how my mentor would cope. I saw her saying, 'If you want to talk to me about something unrelated to the class, do it after the class. We are now in class.' This helped to prevent disruption and keep pupils concentrated.*

*Me: So, this is what your mentor usually said?*

*Lin: Yes, yes... it was a skill in that when she didn't talk to you, the conversation came to an end. So the class keeps running smoothly. I thought it was a useful technique.*



She was impressed by the way her mentor dealt with classroom management, and so I asked her how she felt about her mentor's teaching style:

*Ms Liang's teaching style is rather flexible. Her teaching is like a drama, involving her pupils and making learning a happy thing. The pupils are disciplined, even without a teacher in the classroom. It's magic!! To be honest, although I liked Ms Liang's teaching style very much, I found that it wasn't easy to learn. Maybe it was because I was too restrained. Ms Liang's style was lively and I found I couldn't directly copy it in my teaching.*

Imitation was Lin's main way of learning during teaching practice. This exemplifies that the mentor can be such an important factor in the professional learning of student teachers. Nonetheless, due to lack of the knowledge related to pupils' needs, her teaching still came out awkwardly when she failed to copy Ms Liang's style adequately. Ms Liang's expertise had been developed through her teaching experience over many years. Therefore, she was well-organised and her technique suited her personal experience and personality. A technique learnt through imitation alone cannot necessarily be employed in real classroom practice. Lin's inability may have been due to her lack of teaching experience and the understanding of pupils in her class. However, she considered Ms Liang's style to be the first way to deal with her difficulties. I asked her to give an example of the experience of learning to teach in this period, by using critical incident technique:

*Some pupils were naughty and seemed to challenge my endurance. They disturbed my teaching and distracted other pupils from learning. I really had no idea about how to deal with them... One day I imitated my mentor's way of teaching calculation, guiding my pupils to buy something in a supermarket which I had made up. However, my pupils became too excited and I lost control of the classroom. Consequently, I had to discipline the class.*

This also showed that pupils became the factor, which influence Lin's teaching. Nevertheless, Lin's teaching still focuses at this stage on learning teaching tactics from her mentor. Lin's mentor indicated that Lin attempted to look for the best ways to overcome her teaching difficulties. She tried to copy how her mentor taught and prepared teaching materials, and applied these in her own teaching. Ms Liang explained this when interviewed:

*She has been a hard-working student teacher. I remember, at the beginning of teaching, she said to me, 'I want to be a teacher like you.' I felt she was really just complimenting me. However, she meant it seriously and kept notes of whatever I taught. Then she discussed it with me after the session..... She is very independent and determined. I think that she probably doesn't need much support from school leadership or mentor. All we can help her is to provide her better setting and encourage her more.*

This showed that Lin is a determined and hardworking person and similar statement was also mentioned in Lin's journal. Thus she considered a little hands-off mentoring style to be fitting, allowing Lin to develop her own teaching expertise. She had considered that imitation might be a better way to improve her teaching expertise.

*I started to learn the teaching skills my mentor employed in the class. She had invented a reward system which motivated pupils' good behaviour. Pupils would behave well because they were concerned about gaining a greater number of points. In addition, I observed that Ms Liang was walking around the classroom when pupils were working on their assignments, making sure that pupils were doing exactly what she had asked them to. These were methods I could apply to my teaching practice.*

#### **6.4.2 Teaching without flexibility: strictly following instructions or plans**

In the earlier phase of teaching practice, Lin's learning focused on becoming familiar with how to apply teaching skills and strategies in classroom practice. This was reflected in her preparation for teaching and teaching practice. When I asked Lin about how she learnt to teach and asked her to remember what had impressed her, she answered:

*...When I was doing preparation, my textbook was full of notes. I was afraid I might miss something important. Pupils usually made mistakes in recognising and writing Chinese characters. Thus, I had to be careful in how I taught this subject... For example, when I showed pupils how to write Chinese characters, I would see if they were following me, and so prevent some pupils from doing something different. I could see how I taught and controlled the whole classroom. When teaching mathematics, if I had missed something in pupils' understanding, I was made aware of this when they asked me questions. When reflecting on the class, I kept it in mind for the next session.*

At this time, Lin would negotiate the content of homework with pupils. An experienced teacher suggested that this should not happen. When I asked her how she coped with this particular situation, Lin made the following comments:

*I didn't demand that pupils do their homework at the beginning and didn't insist on my original ideas. I was soft-hearted, letting pupils express their opinions in their homework. Afterwards, I was told that teachers shouldn't do that, and that homework was not negotiable. I realised I would have to change this aspect, so now I am strict about pupils' homework. I didn't give my pupils too much homework and had taken into consideration their ability and time after school.*

Lin's teaching mainly followed the teaching schedules given in teaching manuals. This helped her to save a great deal of preparation time. The books informed her of some useful teaching skills and of points to be noted during the teaching process:

*My teaching mainly followed the instructions in the teaching manuals... The books provided me with information about important things to be taken care of, and reminded me not to omit anything I should be teaching. In addition, I was able to see how much time to spend on each point and what kind of preparation I should make in advance.*

Lin's mentor also noted that this was one of the ways Lin coped with teaching difficulties. She wanted to follow the instructions in the manuals exactly, so that she would be able to feel her teaching presentation had been good:

*...Lin had a plan for doing the teaching she regarded she had to do. One method was to resort to the teaching manual and to follow it strictly. She tried to do her best. But I thought it was rather difficult for her, and even for me, because my pupils didn't have experience of the teaching method discussed in the manuals, so they felt bored and lacked motivation...*

#### **6.4.3 Maintaining classroom discipline is vital**

When she started teaching, Lin considered it essential to make herself approachable to pupils. Thus, she became very close to them and frequently played with them, even allowing some of them to jump on her shoulders. Her mentor, in addition to the workshop she attended, then advised her that a teacher should not act in this way, and said she should 'keep some distance from pupils'. Following her mentor's suggestion, Lin bore in mind that teachers are not friends of pupils and that their relationship with pupils of different ages is not usually the same. Lin mentioned her relationship with her pupils in the following statement:

*The school leadership hold a workshop, especially for student teachers, to solve the problem they encounter. I was informed that when teaching higher-graders, you are the teacher and they are the pupils. You can be friends with them after*

*class. For lower-graders, you have to let them know that teachers are different from pupils by always keeping a distance between yourself and them.*

Lin was also asked to modify her expressions in the class, probably because she had developed a close relationship with the pupils. She mentioned that some colloquial expressions she used had to be changed, or they may have a negative effect on pupils' behaviour. She discussed this with me when she tried to remember the support she received from her mentor and other senior colleagues and student teachers when she participated in the workshop discussion. She tried to remember the situation she dealt with when she was teaching:

*My mentor told me I should avoid using certain language. For example, I shouldn't say to the pupils who stayed silent in the corner of the classroom 'zhuang si' [meaning 'keeping quiet like a dead body'] . Rather, I should change my language to be polite, like 'zhuang sha' [meaning 'you pretend that you are stupid by staying silent']..... I was also informed by same advice when in workshop by a senior colleague, who regarded this as a common issue of the teaching of student teachers.*

Sometimes, Lin was annoyed at the lack of discipline in her classroom and she developed an approach to deal with this issue, called 'treating pupils more strictly'. This teaching strategy in the classroom focused on controlling pupils' behaviour by exhibiting a stricter attitude. For Lin, this became an important principle if she wanted to learn how to behave like a teacher. However, how to 'treat pupils more strictly' became a problem of classroom management, since she had no idea how to put this idea into practice. She tried to establish a reward and punishment system in the classroom, which was suggested by a senior colleague, but failed:

*Lin: I learnt a reward and punishment system from an experienced teacher. It was regarded as being a bit useful in classroom management.*

*Re: Why did you think to adopt this way in your classroom?*

*Lin: This experienced teacher used it in her classroom and achieved the expected outcome. I chose it because I had a Taiwanese language session in a special classroom, rather than in my classroom, and the experienced teacher recommended this as a skill she considered to be useful... However, I said to this experienced teacher, 'The whole class seems to be in a mess and I don't know how to deal with it'. Then, she said, 'You should be stricter'. Yes, maybe I wasn't being strict enough.*

*Re: Was the classroom of this experienced teacher noisy?*

*Lin: No. Maybe she looked strict... So the pupils were disciplined. Yes, this is because I was not strict enough. I don't know why. My mentor told me that I should be stricter.*

Lin paid attention to classroom discipline in the early period of her teaching practice. She mentioned that good teaching started with good classroom control. In addition, she wanted to give a good performance for her mentor, so she did not want her mentor to think that her class was in a mess. She attempted to remember an incident when she felt she had failed to impress her mentor, even though she has looked for the suggestions from other student teachers:

*I tried to keep the classroom in order, and was afraid that it would be in a mess when my mentor came... The situation wasn't good that day, a bit noisy. Pupils raised their hands and yelled, 'Ask me! Ask me!' I thought that I should attempt to control them. Another problem was classroom order during activities. It was quite demanding to discipline them when activities were in progress. Some of student teachers in the school mentioned that the longer activities lasted, the less control you would get in the classroom. This strongly influenced my teaching performance.*

She seemed to be worried about her classroom discipline during the early stage of teaching practice period and this meant that her knowledge in pedagogy still needed to be improved. This was also mentioned in her journal:

*In these two sessions, I gradually took control of my teaching. In one session, the teaching schedule was closely kept to. However, the second session seemed to get out of control and I could not follow the schedule. I found that dealing with classroom management made my teaching activities run smoothly.*

Lin agreed that student teachers should be authority figures in the classroom. Otherwise, they would become exhausted just trying to keep the classroom in order. Teachers should not see their pupils as being the same as they themselves were during childhood, since they are clearly quite different. She made the following statement when she asked her mentor for support:

*I remember my mentor told me she took a student teacher last year into a fourth-grader class, but that the pupils had ignored the student teacher. I thought that if I were to discipline the pupils, I had to position myself as a teacher and show my authority over the pupils... When you teach on the platform, they are naughty and make a noise in front of you and you can't control them. So you can spoil them by giving them too much freedom. Sometimes you have to be strict. After all, you are the teacher.*

Lin's mentor Ms Liang agreed that Lin did her best to maintain classroom discipline, with a view to keeping to the expected teaching pace. The mentor remembered that Lin frequently discussed with her about how to keep the classroom in order:

*I'm reminded of a period of time when she usually came to me and discussed the ways to maintain the order. She said that most of the time pupils were good,*

*except for some naughty boys, but sometimes the classroom was out of order because she had arranged new teaching activities. She was concerned about that very much...*

Maintaining classroom discipline became the most important issue she wanted to handle. She wanted to behave like her mentor and senior school colleagues, who have authority over their pupils and more teaching experience, and like an ideal teacher as described in methods in the teaching manual. By teaching with the principle, 'treat pupils more strictly', she could teach well and pupils could learn efficiently. Lin believed that copying the approaches or skills of mentors or experienced teachers was the most effective way to learn to teach. In addition, she considered that teachers' teaching plays an important role in pupils' learning, that is, that pupils can learn efficiently when they learn passively and never considered understanding the individual learning needs and dispositions of the pupils. Her knowledge in pedagogy had not been adequately developed and her way of teaching was influenced by mentors, senior colleagues and peers.

### **6.5 Focusing on the needs of pupils**

In the latter part of her teaching practice period, towards the end of November, Lin began to consider how to build proper relationships with the pupils and tailor her teaching to their needs. She attempted to combine two teaching ideas in her teaching, namely, her original belief about teaching, i.e. 'helping others is the source of happiness' and the principle she had now developed, 'treat pupils more strictly'. On the one hand, she maintained her teacher's authority and did not allow her teaching judgement to be too much influenced by the pupils, and on the other hand, she attempted to understand her pupils and adapt her teaching to suit them more.



### 6.5.1 Seeking a proper relationship with pupils

Building her authority as a teacher over her pupils, Lin recognised that teachers are different from students, and she did not participate in their activities. She realised that being approachable was not the only important aspect of teaching. In addition, she wanted to make it plain to pupils that she was the teacher, rather than a classmate or good friend. She showed this by her interaction with one challenging pupil.

*Re: So, how do you interact with the pupil you said caused serious disruption and threw his textbooks on the ground?*

*Lin: Better... now he is more polite. Maybe he is more cautious in his behaviour, wondering why I don't care about it. I have found that if I want to discipline pupils I have to 'deal with their weak points'.*

Teaching is not simple. As a career, it is not just about making yourself approachable to pupils or transmitting knowledge. It is extremely complex, being a task for communicating with people and interacting within a particular environment. When I asked Lin about the teaching role, she gave the following response:

*Being a teacher is complex, because you have to talk with others and learn how to communicate with pupils.*

Lin considered it necessary to interact with pupils, but she now disapproved of having too close a relationship with them. Teachers should maintain their authority:

*I don't get close to pupils or encourage them to become close to me... I won't become involved in their activities because this is what their friends or classmates would do, but not their teacher.*

Ms Liang perceived that Lin had started to sense how pupils' reactions had an impact on her teaching. Lin came to understand that good classroom management depends on a proper relationship between teacher and pupils, as Ms Liang explained:

*I explained that if pupils consider you to be a teacher and in control of the classroom, you have authority over them and they become disciplined. If they consider you to be their friend, they will behave as they like and sometimes the class will be in disorder and out of control. Lin sensed that after a period time of teaching. She attempted to adjust her relationship with pupils.*

In addition to Lin's thinking independently with the suggestions of Ms Liang, the interaction with pupils helped Lin to understand how to behave like a teacher. Lin made teaching plans based on what and how pupils should learn, while pupils' reactions provided her with hints for modifications to consider during the next teaching session. Lin's pupils certainly helped her to learn how to teach. When I asked her about her teaching experience during the teaching practice period, she said:

*I encountered a paradox in the process from learning to teaching. That is, I was the person who taught them, but it could also be seen that they were teaching me, for I learnt whether my teaching was acceptable or adequate from their reactions and by making revisions. After the class, I could understand what they liked and what kind of language they normally used, from my communication with them. This was the way to understand them. It is difficult to say who taught whom.*

This idea is also mentioned in Lin's journal, in which she indicated that her improved understanding of pupils had recently helped her to teach more smoothly. She was

gradually able to predict how pupils would react to certain gestures and expressions. This helped her to maintain order in the classroom, thus improving her teaching performance.

*I found that pupils could discern my wishes from my demeanour. When they were noisy, I pretended to be angry, and some pupils might have understood from this that 'the teacher is unhappy' and 'we should be quieter'. In addition, pupils seemed to know how to behave to match my expectations. It could be said that, over the teaching period, the pupils and I both achieved a certain kind of understanding about how to create a more harmonious atmosphere in the classroom.*

At this moment, compared with earlier references, Lin's pedagogical knowledge has slightly improved, starting to see herself as the teachers of the pupils in the class. This has developed due to the support and suggestions of her mentor, her understanding of the interaction between pupils, allied to her independent thinking of the interactions with pupils. This sort of change not only shows in the change in her expertise of classroom management but the way she considered how to teach.

### **6.5.2 Tailoring teaching to pupils' needs**

I mentioned in the previous section that Lin's teaching initially followed teaching manuals. In the latter part of her teaching practice period, she came to realise that teaching should be tailored to meet pupils' needs, and she indicated that teaching manuals did not provide enough information for teaching practice. When she included specific additional content in her class that she considered to be necessary, she discovered that, after teaching, her extra content had not matched the original teaching outline in the manual. Pupils seemed not to learn what she expected. This might have

been due to her lack of understanding of individual pupils' needs, so that pupils were not able to learn these additional materials well. Thus, she considered that her teaching expertise still needed to be improved. When Lin was requested to remember important events in her learning and teaching, she said:

*I followed the teaching manual, but it was not detailed enough. Thus, I put in everything I considered to be necessary, but that wasn't enough to express what I wanted to make the pupils understand. I really need time to improve my teaching. For example, in one session, concerning 'picking up leaves', I talked a lot about leaves and led pupils in doing handicrafts. But what I really cared about was what they learnt through this process. I hope that they learnt something, rather than just played around.*

Her greatest challenge had become how to use her personal understanding of teaching materials to transfer the knowledge to pupils. She still needed to learn how to 'translate' knowledge, making it understandable for pupils; for example, she had to discover what kinds of sentences or examples could be used in this process. Lin remembered one particular situation.

*I still feel helpless at understanding how pupils think, forgetting that their understanding is quite different from ours. Thus, when teaching, my countenance unconsciously conveyed the message, 'Why don't you understand? I have explained it so many times!' I was alerted to this mistake when I discovered that my pupils felt ashamed of their failure. It is the nature of pupils to make mistakes. My responsibility is to help them to improve their learning experience and overcome their difficulties.*

Therefore, Lin considered that she should spend more time preparing her teaching materials, and this can be interpreted as her perceiving that her pedagogical knowledge

was not sufficient for effective teaching. Lin expressed the difficulties she encountered during her teaching practice period:

*...Even though I had a very detailed teaching plan, I had forgotten how to tailor my teaching to the needs of the pupils. I really don't know what I did that day... Was it that I had made insufficient preparation for this subject? Not only did I have to understand the material, but I had to endeavour to enable the pupils to understand it. It seemed I was not good enough for this task.*

Ms Liang agreed with Lin's interpretation of her teaching difficulties. The improvement in her pedagogical knowledge came from her increased understanding of pupils' dispositions and their needs. This was important when teachers were just starting to run their class. Her mentor noted

*I remember that she started to pay more attention to the learning and characteristics of each pupil three weeks ago... When we had a discussion about teaching, she was able to refer to class reactions or the specific behaviour of particular pupils that worried her, and she would ask me for suggestions for dealing with them...*

Lin found that her understanding of pupils was limited when she reviewed an example of their social science homework. She had over-estimated the ability of her pupils and failed to give them writing guidelines. Nevertheless, even though she lacked an understanding of her pupils, Lin attempted to tailor her teaching to their needs. When asking her to remember a learning experience which impressed her by using critical incident skills, Lin responded as follows:

*I remember one time I assigned homework for the pupils and asked them to write about their understanding of the session. I supposed that they knew how to do that. It was just to see if they had understood the material I taught that day.*

*However, their homework wasn't done in the way I expected. Consequently, I asked them to write it again, and told them that I needed at least fifty words of writing or an essay with no more than a hundred words... It occurred to me that I should take note of this situation. If I didn't clarify the standard of the homework, they couldn't be expected to know how to do it. I had to reconsider what they could do at their age. I shouldn't have assumed that they could understand what I could understand. They think differently from the way I did at their age.*

Thus, Lin sensed her situation and endeavoured to find the way to deal with her lack of understanding of pupils' backgrounds. During teaching practice, she attempted to understand pupils' sub-culture, and this became the main source of her teaching stress. When asked what most influenced her teaching performance, Lin responded as follows:

*I think it was that I didn't understand the pupils, and so my teaching was ineffective. However, it was difficult to understand them in such a short time. I should have spent more time observing them and being with them, with a view to understanding the language and vocabulary they use in their everyday lives to communicate with each other; in other words, their behaviour.*

She considered that teaching was not just a simple matter of learning and teaching. Rather, teaching involved helping pupils to develop their learning confidence by employing effective teaching approaches and skills. She regarded the task of teaching as being to act as a guide for pupils, helping them to deal with everyday life and to resolve conflicts between peers. Through the tasks she implemented, she came to understand how pupils interacted with one another, and she gained a sense of achievement from the smiles her pupils gave her. It made her feel that she had made a personal achievement and fulfilled her duty as a teacher. Lin mentioned an unforgettable experience during the teaching practice period:

*I remembered that one day three pupils were in conflict and the class teacher was not in the classroom. I attempted to get this conflict resolved but it seemed beyond my ability... It was quite frustrating, but you still had to apply yourself to helping them to resolve their conflicts. I felt quite good about doing this. They just needed me to help them, and once I found that I could help them and they smiled at me, I felt very happy.*

Lin would adapt her teaching according to the pupils' reactions. The following statement shows that Lin could anticipate pupils' likely reactions and was able to modify slightly her teaching plans in accordance with changing situations. In addition, she could judge the extent to which her teaching content for pupils was adequate. Lin recalled another critical incident that left an impression on her:

*I found some pupils were saying 'Let's play Die Xian',<sup>10</sup> and I sensed something was wrong, so I told them, in a serious way, 'Please don't play that game. It is very dangerous.' The pupils stopped, and then I explained my reason for saying what I had said: 'I am not sure it is safe. It is rather dangerous. There are some stories which mention that playing it will cause something bad to happen. So please don't try it, or I will be very angry.' It wasn't good to tell them too much and spend too much time on it, so I only briefly explained it. They are at an age when they feel curious about everything around them, and it was then that I hesitated over whether or not I should have put this in my teaching.*

Through statements made in her reflective journal, Lin showed that her attempts to understand her pupils' thoughts better have helped her to improve her teaching performance:

*I stayed in the classroom, reviewing pupils' homework and observing their interactions. Pupils usually came to my desk and talked to me about their everyday lives and their relationships with their classmates, friends, and families. The suggestions made by tutors were correct. Through these*

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<sup>10</sup> Die Xian is a game in which ghosts are contacted, similar to the western Ouija Board.

*interactions, I could understand more about the pupils' backgrounds, and I helped them where I could. Also, I could see which pupils were lagging behind in their learning progress.*

Ms Liang also indicated that Lin had started to understand how to tailor her teaching to her understanding of pupils' individual needs. She modified the teaching schedules in the teaching manuals with her understanding of how pupils learn and following discussions with Ms Liang. This was indeed a significant improvement:

*Recently our discussion was around pupils' characteristics and how to improve their learning with proper teaching designs. I know she usually looks for some interesting and useful materials from the internet or for information from books, with a view to finding suitable ideas to help her judge the learning of pupils more accurately and to making her teaching more suitable. Her teaching has become more interesting and suitable for the pupils in the class.*

Reflecting on the stifling classroom atmosphere, Lin thought that using pupils' language in teaching could make her teaching better. She attempted to understand why her teaching bored them and changed her way of teaching. When she was asked to reflect on the nature of good teaching and give an example of a good teaching situation, she made the following statement:

*I felt that whole the class lacked energy, and maybe this was because we had reviewed the textbook for a long time and had a test in the following session. I found some of them were confused about one mathematical concept, while others who had understood it felt bored by my repeated explanation. I thought maybe I should use their language to explain it, or invite those who understood it to the platform to explain, so that I could learn how to explain this concept to pupils properly. Today, I asked a pupil to do this, and I found it was quite useful. But it would waste too much time if I used it throughout the whole session.*



Lin then reflected on the adequacy of her teaching performance, classroom management, and her understanding of teaching content in teaching practice, and she considered what improvements she could make. She evaluated her performance and found that she could efficiently integrate all of her teaching knowledge into her teaching. Unsurprisingly, her confidence in teaching had consequently been greatly boosted. When she was asked to identify changes in her attitude or behaviour during the teaching practice period and provide an example of her teaching, Lin replied as follows:

*I feel that I can control the teaching pace. For example, before teaching, I just briefly glanced at the teaching material and drew up a schedule in my mind which I could then present from the platform... I didn't feel nervous or anxious, so I could clearly and logically demonstrate the teaching materials and control the teaching pace. It wasn't like before, when I couldn't manage the time properly during which my pupils were reviewing their learning, so that the session ended awkwardly. Now, I can end the session with a carefully-prepared conclusion, letting pupils review what they have learnt, and praising those whose presentations are informative. Good presentations have become my teaching resource for the future...*

In addition, Lin also appreciated that the school leaderships chose Ms Liang as her mentor and created a suitable atmosphere in the school for student teachers. The regular workshops provided a platform to communicate teaching perspectives and teaching tactics between senior colleagues and other student teachers in school. This became an important factor which greatly improved her teaching expertise.

*I am happy to have Ms Liang as my mentor and she indeed helped me a lot, no matter in the communication of teaching perspectives or the understanding of teaching tactics. She also gave many opportunities in practicing my teaching. Moreover, the workshops allowed me many chances to communicate with other people.*

At this stage, Lin began to take into account the needs of her pupils and found that this worked well in her teaching. These show that her effort to interact with pupils helped her develop her own pedagogy. The support of her mentor and senior colleagues are frequently mentioned in her interview. She became convinced that her teaching could be improved if she could understand more about her pupils. She began to teach with the idea that she should treat the pupils well, and then adopted the suggestions from her mentor and from other experienced teachers; suggestions such as, 'treat pupils more strictly' or 'keep to principles in setting homework'. Thus, she formed her own teaching judgement, both in terms of classroom management and teaching, and Lin behaved like a teacher who cared about the needs of pupils and had developed personal teaching judgement. That means that her pedagogical content knowledge was improving at the later teaching practice period, as she began to understand and tailor her teaching to the needs of pupils.

## **6.6 Reflection on teaching performance**

Lin was gradually developing her own personal style of teaching in December and January, learning how to prepare teaching materials properly. Moreover, she had clarified her idea of learning to teach. Through trial and error, she had accumulated experience in teaching and classroom management.

### **6.6.1 Establishing a personal teaching style**

It was noted that, in her earlier period of teaching, Lin could not control the teaching pace. In the second-stage interview, Lin showed that her confidence in this aspect had grown and that she had gradually developed her own strategy for the preparation of

teaching materials. Paying attention to the behaviour, thought and disposition of pupils, she improved her understanding of pupils and used this when she was teaching and managing the classroom. When she was asked to express how her attitude and approach had changed over the teaching practice period, she said the following:

*When I was teaching, I knew that if I spoke too long on the earlier material, I would be forced to spend less time on the material in the later session... But now I focused more on the thing I considered to be important. It didn't matter if I included unimportant things. That was fine if I could do it and my pupils could learn more.*

It can be perceived in this statement that Lin's teaching are being tailored to the needs of pupils and not just focusing on particular teaching tactics per se. Lin found that she could adequately manage the classroom and indicated that the application of teaching skills and university knowledge should take into account the disposition of the pupils. This became the basic principle when she talked about teaching:

*Lin: Classroom discipline became better and I learnt how to control the whole class... When I began to teach several weeks ago, I didn't clearly understand the situation of the whole class. This has been something I have learnt over time... At this moment, I started to remember what I learnt at university, which was that I should give positive feedback to pupils and provide a good model for them to imitate.*

*Re: It seems that your pupils got used to your teaching strategy and your teaching was on track.*

*Lin: Yes. But now I started to worry about whether I had gone too far in controlling my pupils. That is, maybe they only showed the expected behaviour when I used this teaching strategy, but it had not become part of their lives.*

This quotation showed that Lin no longer considered her university learning to be useless. In addition, she mentioned that her teaching experience proved that her university learning had been right, particularly in relation to keeping pupils motivated. This made pupils' learning effective and enjoyable. When Lin was asked about her most impressive learning experience during teaching, she said:

*This [university learning] is correct. Pupils need to be motivated, so that they can learn effectively. I should first understand what pupils need and how they learn, and thus I can help them to learn.*

This was also demonstrated in her reflective journal, but Lin also reflected on university learning in another respect:

*I found that, to some extent, behaviourists can be proven right in practice. One day I got annoyed when I found that the pupils didn't follow my instructions about something I reminded them about it many times: 'raise your hand before you speak'. I decided to follow the suggestions of my mentor: and discourage this behaviour by ignoring it. This worked quite well in my class. In no more than one week, the pupils gradually learnt what I wanted them to do.*

Ms Liang also noted that Lin was forming her own personal teaching judgements and was starting to evaluate her university learning. Lin usually discussed this with her mentor and other senior colleagues, and then compared her teaching experience with university study:

*She usually asked me to make arrangements to see the teaching and classroom management of different grades, classes, and subjects. I have to say she's always hard-working and doesn't want to lose any chances to learn. Sometimes she tried to analyse the teaching she saw and shared her viewpoints with me, based on her experience and university learning. She has developed her own ideas of teaching and has started to reconsider her university learning...*

During the teaching practice period, Lin observed the teaching of different teachers, and thought about suitable teaching styles. I asked her to give details of the situation by offering an illustrative critical incident. She indicated that, after weighing the context of her own class, she considered the classroom management of Ms Huang to be unsuitable for her, because it was time-consuming, and she preferred the style of Ms Liang, her mentor:

*Re: What did you think of Ms Huang's teaching style?*

*Lin: She spent too much time taking care of how many pupils were studying in her session. I couldn't apply that in my class because it would delay my teaching time. I preferred Ms Liang's style, as it matched the needs of my teaching. She told pupils that she only answered questions if pupils raised their hands, and she deliberately ignored those who violated this rule. Pupils knew her regulation and followed it. When I employed this in my session, classroom management improved and I could focus on preparing the teaching material. Pupils were only allowed to express their opinions if they raised their hands and asked a question.*

Lin mentioned the reasons which caused her to consider different ways of doing classroom management:

*Re: Why did you consider changing the way of doing classroom management?*

*Lin: I felt I had to learn many teaching skills and how to employ them efficiently in my class. During teaching practice, I had to meet different groups of pupils, not only those in my classroom, and a particular approach to teaching may work with one class but not with another. For example, I used a reward and punishment system to discipline the pupils of my class, but it didn't work well with pupils in another class. So, I had to try another way to calm them down and continue my teaching. I couldn't let the class stay in a mess. I had to adjust my way of teaching to changing circumstances.*

*Re: That's the way you dealt with different classes?*

*Lin: If one way didn't work, I had to find another way of coping. If a situation stayed the same for a long time, I had to contrive a way to announce to them, 'The class is starting'. Just doing what I thought of at that moment didn't leave me time to worry about it.*

Lin's pedagogical content knowledge improved as she showed her teaching expertise in dealing with the challenging students in her class, combined with her understanding of pupils and the tactics she learned during teaching practice period,

*A naughty girl was always speaking and disturbing to other classrooms. She had been considered as a problem in my class. At the beginning, I really had no idea of how to deal with her; however, I found recently in her diary that she lacked in interests in the math so she usually got low score in the exam.....Thus I took her after class and then informed the situation to her parent and helped her catch the progress.....*

Besides tailoring her teaching with the needs of pupils, Lin showed her achievement in classroom management. In the following quotation she demonstrates that she could to great extent pace her teaching well and avoid the possible disturbance or interruption by using suitable tactics with the understanding of the pupils in her class,

*I found now she was better and more concentrated when I was teaching I think I can gradually predict the thought and behaviour of pupils and use some tactics to guide them to what I expected..... This may be derived from my understanding the needs of pupils. I'm so proud I could take a pre-empt action to attract the concentration of pupils.....When I perceived one pupil's eyesight showed the sign of distraction, I would ask him to read the article or some questions or some ways of reminding him back to the teaching content. So the classroom is usually kept in order and I'm satisfied with that.....*

### 6.6.2 Developing teaching expertise by trial and error

Similar to the belief she expressed about learning to teach in the earlier interview stage, Lin considered that teaching expertise developed through trial and error, seeking the best ways for teaching and developing a personal style. It was highly possible that, in the beginning, teachers might feel frustrated with difficulties they felt they could not resolve. However, she thought that new teachers should overcome these difficulties and be brave about the challenges they encountered. Teaching is a practical thing. It has to be learnt in the classroom. Teaching knowledge from books cannot always be used directly in practice. Until you try, Lin reasoned, you cannot really know how to teach.

*Lin: It's like doing an experiment. When you have done it many times, or after you see the teaching of other teachers, you understand, 'Oh! I can teach in this way'.*

*Re: I understand. These things aren't mentioned in teaching manuals and they are the things that are difficult to deal with.*

*Lin: Yes, these things can only be learnt by accumulating experience. It is useless to just go and teach, even when your teaching plans are detailed... For example, at the beginning of teaching practice, one of my problems was the 'teaching pace'. I felt anxious when I finished the whole session 10 to 20 minutes early, and just stayed on the platform, waiting for the end of the session. I attempted to resolve this problem by understanding the pupils better and learning teaching approaches and skills from my mentor. Therefore, I learnt during the process.*

When she first started teaching, Lin was not clear about how to manage the classroom adequately and effectively, so she tried different ways and modified them as necessary. For example, when she was doing teaching preparation, she would prepare her teaching outline and activities and adjust them according to changing circumstances in the

classroom. If she found that if pupils did not understand, she would slow down the teaching process, or change to another way of teaching. Lin was asked to analyse her teaching experience and give an example by using critical incident skills:

*For example, I spent lots of time scheduling my teaching activities. When I prepared my class, I would write something down on paper: for example, what I should do in the class and the homework I should assign to the pupils. But sometimes, if pupils couldn't understand the process, I would slow down and seek another way of teaching. The homework would be re-designed. Another example is that, in the morning, I would try one way of maintaining discipline by asking pupils to tell me who was talking during class. Those who told me gained a point and those who did the talking lost a point. Afterwards, many pupils came to me to tell me who had been talking, but some of them had also been talking in the class. I sensed that those pupils should discipline themselves before telling tales about others, violating the rule of the class. They were paying too much attention to who was talking in class and too little attention to their studies. Thus, I ignored them, and did not give them points. I started to consider another way to maintain classroom discipline. It is by 'hit-and-miss', the accumulation of experience, that we can learn how to manage the classroom.*

Lin preferred to learn how to teach by experimenting with different teaching strategies in practice. She adjusted her teaching according to changing circumstances, looked for better ways to deal with the situation, and learnt how to manage the classroom and teach effectively. It can be said that Lin is trying to develop her teaching style by experimenting with teaching skills, whatever she can learn from text books, and suggestions from experienced teachers. This also shows in statements in her reflective journal:

*Group teaching was suggested by Ms Chen, who was the class teacher in the next classroom. I remembered that I had learnt this at university but had not employed it in the class in the teaching practice period. This strategy seemed to*



*work well when I taught it in social science. Grouping helps pupils to exchange opinions and understand the different opinions of their peers about issues. However, I considered that it did not work well in Mandarin class, especially when I asked them if they recognised certain Chinese characters or how to make a sentence by following a certain pattern (for example, making sentences which include 'if... then... ').*

Lin's mentor explained her understanding of Lin's learning to teach during the teaching practice period. Lin usually bravely attempted to use some new teaching skills and tactics in her teaching, and discussed and requested feedback from her mentor. From this it could be seen that Lin is forming her perspectives on learning to teach:

*It seemed to become her principle of learning to teach. She usually came to me with some teaching tactics or new teaching perspectives, and discussed with me how to apply them effectively in the class and what the impacts on pupils' learning would be...*

## **6.7 Conclusion**

This chapter has explored Lin's professional learning and the improvement of her pedagogical content knowledge during her practical teaching period. It can be seen that her teaching has been mainly influenced by her mentor and her own disposition, suitably supported by school leadership and senior colleagues. However, Lin did not mention the influence of parents in her teaching. At the beginning, Lin's teaching method strictly followed the suggestions of mentors and teaching manuals. This is evident from the quotations in Section 5.4 above, which shows how she looked for effective teaching skills and strategies. After teaching for a period of time and gaining a basic understanding of pupils' dispositions, she attempted to tailor her teaching to pupils' needs and looked at how to play the role of teacher properly in terms of her

relationship with her pupils. This is demonstrated in Section 5.5. The earlier phase of her teaching was mainly focused on developing teaching expertise, as indicated again in Section 5.4. This then shifted to the needs of pupils during the later stage of teaching practice. At this later time, her teaching and classroom management were more concerned with the dispositions of pupils than her initial teaching. This demonstrated a significant improvement in pedagogical content knowledge.

The main factors which affected Lin's learning were also identified in this chapter. I found that her mentor played an important role at the earlier stage of her teaching, while the influence of pupils became stronger at the later stage of the teaching practice period. Peers and senior colleagues also helped Lin with her teaching, providing her with advice on how to teach when she was in difficulty. In addition, I consider that her disposition and background helped her to learn to teach successfully during the teaching practice period. It should be noted that Lin was an intelligent and independent student during her own school life and had a positive school experience with her class teachers. In addition, her religion might have influenced her teaching beliefs. Lin's personal background helped her to think independently about her teaching strategy. Consequently, she was more likely to consider the needs of pupils and review her university learning. Also she was more willing to improve and look for professional growth in teaching. Thus her teaching expertise was greatly improved and her own teaching approach changed qualitatively during her teaching practice period.

This case study has demonstrated the teaching and learning experience of a student teacher from a university institute of education, one of two teacher-training routes. Lin successfully and smoothly went through the idealist, survival, tactical, and strategic stages, and then began to develop her own teaching perspectives. I consider that the two

factors that were particularly crucial for her successful learning and teaching were the support she received from her mentor and her personal disposition. The evidence also shows how pupils, peers, senior colleagues and school leaderships affect the learning-to-teach of student teachers in the teaching practice period. This addresses my second research question: how do these factors influence their development as beginning teachers and their broader learning experience? To clarify whether the different teacher-training routes affect the learning and teaching experience of student teachers, I now explore the case of another student teacher, here named Zhang.

## **Chapter 7**

### **Zhang's teaching experience**

Zhang's teaching experience can be revealed from the two-stage interview and her reflective journal, and from data derived from the critical incident aspects of both data collection methods. The interviews were used as the main data source, with her reflective journal and the critical incident technique providing much additional information, which was used to support the interview data. The data from the interviews and journal was originally in Mandarin, but in this chapter it is translated into English. The first interview with Zhang took place on 8 October 2006, when she had just completed a one-month teaching observation and had experienced one week (five sessions) of teaching practice, teaching Chinese and mathematics. The second interview took place on 23 December 2006, around one month before she finished her teaching practice. Her story illustrates her experience of learning to teach and shows how she developed her teaching expertise during the teaching practice period.

This chapter consists of six sections. Section 7.1 describes the school environment and provides information about the context of Zhang's teaching. Section 7.2 presents Zhang's personal background and examines its impact on her teaching concepts. Sections 7.3–7.6 discuss Zhang's learning experience.

#### **7.1 School environment**

Zhang's university study took place in a four-year teachers' college, and at the end of it she taught, with a mentor, a sixth-grade class (twelve-year olds) in a primary school located close to the centre of a town in Southern Taiwan of about 50,000 inhabitants. A brochure, which I was given when I visited the school, explains that the school has a

60-year history, and that in the 2006 academic year there were twenty-seven classes with around 800 pupils. The school management team at that time included a head-teacher and three heads in charge, respectively, of teaching and learning, of pupils' behaviour and discipline, and of general affairs. Half of the approximately forty teachers in the school were over forty years old. Five teachers had a master's degree and thirty had a bachelor's degree. Four student teachers were assigned to the school during this year.

Compared to other primary schools, the head-teacher in this school paid more attention to the teaching of student teachers. The team asked the student teachers to study closely so that they could exchange their learning experiences. The head-teacher also organised and presided over a seminar for student teachers. When asked about the level of support she received from the school, Zhang replied:

*The school provided a classroom as an office for student teachers. Thus, sometimes we could stay there to discuss our teaching performance and prepare our teaching materials... I sensed that the head-teacher was very serious about teaching practice. She invited us to a seminar once every two weeks, which I regarded as being quite useful.*

Also, during the observation period, which is usually during the first weeks of teaching practice, student teachers are normally assigned to classes of different grades, so that they can experience teaching pupils of different ages. During her time of observation, Zhang was asked to observe at least three sessions per week in her mentor's class and another three in other classes. She wrote down everything she saw and discussed it with teachers, and in her reflective journal she noted that:

*Today, I visited a second-grader class. Compared with the sixth-grader classes I visited last week, the pupils were quite different. It seemed that teachers in the classes should care more about their pupils...*

Finally, student teachers are usually given more time to prepare for the teacher qualification exams in March of the following year, and are provided with the necessary support for them. Zhang particularly mentioned this to me in the interview and indicated how much she appreciated the help the school gave her:

*The school invited those who had jobs in other schools to teach us how to cope with the forthcoming examinations. Also, senior colleagues showed us how to perform as teachers in the examinations.*

Thus, we can recognise that the school leadership of Zhang was supportive during the teaching practice period. It provided student teachers with an office and asked beginning teachers at the school to give them suggestions about future examinations. Zhang's mentor, Mr Tu, was a class teacher with almost ten years' teaching experience. He had graduated from a teachers' college in southern Taiwan, and he was studying for a master's degree in graduate school. Tu was an easy-going male teacher, who considered that the best way to learn to teach was through practice, according to Zhang's statements. He told Zhang:

*It is through teaching by yourself that you genuinely learn to teach. You can't learn it just by observing. That's absolutely different... I mean you have to experience teaching and learn how to manage a class, and this can't be learnt through observation.*

Tu indicated that he considered classroom management to be the most important thing which student teachers have to learn. He said:

*If a teacher cannot manage the classroom well, how can he or she teach? The whole class will be in a mess. Pupils don't listen to you. First, I'll teach Zhang how to manage the class. In terms of teaching, I think if she can manage the class well, it will not be difficult for her.*

Zhang noted that her mentor was supportive and gave her useful suggestions, both as regards teaching tactics and sharing teaching perspectives. He wanted Zhang to stay in the classroom more often and see how he was teaching. Then, afterwards, they could discuss it. Zhang said:

*He reminded me to watch his interaction with pupils and wanted me to describe it and explain his reasons for it. Sometimes we had different perspectives, but I usually followed his way and attempted to apply it in my own teaching. He wanted me to have my own teaching perspectives, not just copy his, but he said this was unavoidable at the beginning of teaching. He was so considerate!*

This section demonstrates that the school provided an appropriate environment for student teachers. The school management team gave them a great deal of support, and the mentoring Zhang received helped her to learn to teach. The following sections will illustrate how Zhang learnt to teach and change her teaching perspectives during her teaching practice period in the areas mentioned in Chapter 3.

## **7.2 Original belief about teaching**

Zhang told me that she was born in southern Taiwan. Through the interviews, I came to regard her as gregarious and well-disposed. Her image of teachers came mainly from her own sports coach at primary school. The coach regularly reminded his pupils to 'grasp essential points and behave properly on all different occasions'. Zhang explained it as follows:

*He demanded that pupils should do what they should do in schools. For example, when in the playground, we were allowed to do sporting activities, but in the classroom, we had to do our best to learn. He insisted on this when he was teaching. However, privately, he cared about us and could detect whatever was happening around us. For me, he was a teacher, a coach, and a father.*

Zhang felt that she had benefited a great deal from this principle, and she hoped that as a teacher she could be like her coach, who was very popular with his pupils. However, a senior high school teacher she mentioned had been a bad example. He usually adopted a sarcastic tone when he talked to his students, and his main concern was the score they attained in examinations:

*I really don't like this type of teacher. When our exam results weren't satisfactory, he blamed us for not working hard enough and was impatient when teaching. He said, 'Why couldn't you understand this concept when students in other classes could?' Also, he never repeated the same content, even though we told him we were still confused about it. He considered that he had fulfilled his responsibility and it was our business to work it all out. Luckily, he was changed at the end of that year and we didn't see him in class anymore.*

Zhang has been a private tutor since undergraduate school and has taught students in primary schools and high schools. However, what really made an impression her was her behaviour when she taught in a cram school, where most of the students were third and fourth-graders. She unconsciously treated pupils who were pretty and smart better than the others. The school manager brought this to her attention and so she changed her behaviour:

*Afterwards, I tried to treat every pupil fairly, and not pay more attention to particular pupils. This experience had a huge influence on my school-teaching. I learnt to interact with all the pupils, but not to have too much physical contact*



*with any of them. I considered I should avoid being too intimate with certain pupils and treat them all fairly.*

Zhang also mentioned why she had decided to become a teacher. She had found that children were cute and she liked to be among them. Also, teaching was a stable career and being a teacher brought her a greater sense of achievement.

*Being a teacher enables me to know how to help children and guide them, which is different from raising children. For me, this is a big challenge and I will be happy if I can help them to reach their potential to a greater extent...*

She also spoke about her teaching perspective and described her ideas about the classroom and pupils' learning:

*I think I will pay more attention to creating a good classroom atmosphere. I want all my pupils to work together and understand that every one of them is part of the class... Teachers should set an example for pupils. Not only should they transfer knowledge, but, most importantly, they should teach pupils to have a good attitude and behave well.*

These statements show that Zhang regarded good teachers as being empathetic and patient, and she wanted to be a teacher with these characteristics. In addition, they should always stick to their principles when teaching and generally in dealing with things. They should not be too serious and should develop a good relationship with their students. Zhang also indicated that each teacher and pupil is unique and all pupils should be treated fairly. Rather than excessively using their authority over students, teachers should care about students' everyday lives and share their own life experience with them.

### 7.3 Initial struggle

When first beginning to teach, Zhang faced a similar problem to that which Lin had experienced. As mentioned in the previous section, Zhang considered that teachers should stick to their principles and show sympathy for their pupils, treating them in the way they deserved and seeing them as individuals. However, she found it rather difficult to put these ideas into practice, as she recorded in her reflective journal:

*I know that I should take care of every child... but this seems a bit difficult to do at the moment. I find that I have much more to learn. As far as I am concerned, today's teaching was a mess, even though my mentor said that it was good enough for the first time. The pupils were OK, but the pace was out of control.*

Zhang mentioned her worries about teaching many times during the first interview. Most of these worries emanated from the gap between what she wanted to become and what she was actually achieving. She even wondered how to behave like a good teacher:

*I was quite depressed. Maybe I expected too much of myself, but it was really frustrating. I found that if I attempted to take care of every individual pupil, the behaviour of the whole class got out of control. I tried my best and prepared well before a class. It was quite sad that it never turned out as I had expected.*

The preparation of teaching material was another problem. Primary teachers in Taiwan have to know how to teach most subjects. Zhang was worried that she would not be able to deal with some subjects with which she was not familiar. In high school, she had chosen social science as her study route (the alternative route is natural science). Thus, she felt she lacked scientific knowledge. She thought that, if she taught natural science,

the only way she could do it would be to read every word in the textbooks and to follow this in her explanation:

*To be honest, I never touched this field of knowledge after I graduated from primary school. Also, I was a social science student, so I had no opportunity to touch this [natural science] and gain experience of it. If I wanted to teach this subject, what I would have to do was memorise the content in the textbook and tell it to the pupils... but was this right? I didn't think this was teaching...*

Zhang felt her lack of essential knowledge when she was assigned to a natural science session, which was for a special experiment. She had carefully memorised what should happen in class when she was asked about a specific situation. She remembered:

*I prepared the stuff for the experiment and remembered every part of the procedure. When in class, I explained what should be done in this session and went around every table to see whether the experiment was going well... It seemed a kind of mechanical operation. What did the pupils learn from the session? I was only thinking about how to operate the experiment. I didn't think pupils would like science because of this.*

Zhang also mentioned her struggle to teach mathematics in her reflective journal. Even though she had properly prepared, she judged that she had performed badly at the end of the session:

*Should I have prepared and thought about it more? I supposed that I had done enough preparation... At the end of the session, everything was in chaos. I tried to give them [the pupils] some questions and explain how to answer them. I felt that my session was disorganised, so they would feel that the learning wasn't interesting...*

These statements collected from interview and journal shows the different dispositions between Zhang and Lin, whose story was told in the previous chapter. Lin seemed to be relatively independent and calm when encountering difficulties whilst Zhang displayed much anxiety and worry about her teaching. The respective mentors of Zhang and Lin needed to adopt different mentoring styles to accommodate the different dispositions of the two student teachers.

Indeed, Tu, Zhang's mentor, mentioned Zhang's worries and attempted to comfort her. She knew that Zhang needed more support and specific guidance as she began teaching.

*She felt shocked and nervous, because this wasn't the situation she thought before. I think she needs more support and more guide for her teaching and this is the best for her in teaching practice period.*

School leadership also perceived the needs of Zhang and requested some senior colleagues to give her support when necessary. This helped her overcome the struggling at the beginning. Zhang mentioned this in her reflective journals,

*The headteacher seemed to sense my struggling in teaching and told me other teachers I could look for help when my mentor was busy and not available. Sometimes these experienced teachers came to me and gave me encouragement. Then shared experience they used to have when at the beginning of teaching. These were helpful for me. I felt I was the member of this school and comfortable in learning to teach.*

With the effective support of her mentor and the care of school leadership, even though Zhang struggled a lot and worried about her teaching, she conquered the initial struggling stage and survived the early period of teaching. At the next stage, she started to look for strategies to overcome the difficult situations she encountered.

## **7.4 Learning how to cope with difficulties and be a better teacher**

Having struggled at the beginning of teaching in the first two weeks in October, Zhang began to look for ways to deal with the difficulties she was encountering, drawing on the suggestions and support of her mentor. First, she resorted to following the suggestions of her mentor, senior colleagues, and teaching manuals, with a view to understanding what good teaching should be like. Second, she attempted to discipline the pupils, so that the sessions in the classroom could run smoothly. Third, she focused on applying teaching skills and tactics to help her deal with classroom difficulties; and fourth, she realised that controlling her emotions was an issue she had to deal with.

### **7.4.1 Behaving as taught by others**

Zhang benefitted more from Tu's suggestions when she attempted to improve her teaching skills. Her mentor usually provided some suggestions about how to run the whole session properly. Zhang gave me an example when I asked her how she was supported in the classroom:

*...When asking pupils to discuss their Chinese assignments, I found that they spent too much time, so my mentor reminded me in the session that I had to hurry, otherwise I might not complete my teaching schedule in time... After the session finished, my mentor suggested that too much time had been wasted asking too many pupils to express their opinion. Two or three pupils were enough to choose the best model and ask the other pupils to follow it...*

Zhang was also reminded that she should be aware of her behaviour and how she spoke in front of pupils, since she did not know what the pupils thought of their teacher. She wanted to behave like the teacher she recognised herself to be. Her mentor noticed this and gave her some suggestions. In my view, this was because Zhang had just started to

teach and had had little opportunity to spend time with her pupils. Thus now her idea of teaching focused on teaching skills and learning teaching tactics, but she had not yet considered tailoring her teaching to the needs of pupils. She stated this in her reflective journal:

*...Today, the class teacher taught me that if I had too much fruit and couldn't eat it all, I shouldn't give it to my pupils, even if my intentions were good. If I did, pupils who don't like to eat fruit would give their fruit to other pupils, saying this is what our teacher gave us. This might cause misunderstanding with parents, or the pupils may throw fruit at each other in the classroom. My mentor suggested I should be careful about my behaviour and its impact on pupils...*

Zhang mentioned that she gained much support from her mentor, including in classroom management, teaching, and understanding pupils, when she was confused and struggling with how to teach. When I asked her how she coped with difficulties in teaching, she answered:

*It was difficult to prepare a teaching schedule for three sessions a week, but I felt that I couldn't teach properly if I didn't know how to teach in advance in detail; for example, when I had to organise a group discussion or design teaching activities to motivate the pupils to learn. This was quite difficult... My mentor suggested that I should consider what was stated in the teaching manuals, but not necessarily follow all of it. I should also not worry about following the exact schedule. I could always do it in the next session.*

During the interview, Zhang's mentor indicated that Zhang was the most hard-working student teacher he had ever met. She usually consulted him when she had problems with teaching:

*...Whenever she had problems she always asked me for suggestions. Sometimes I also discerned her problems when teaching... I always do my best to help*

*student teachers when they ask me. Luckily she was the kind of student teacher who liked to raise questions and discuss them...*

In addition, Zhang usually consulted her senior colleagues for their teaching experience, because she regarded it as being useful for her teaching performance:

*...I needed to learn how to be an experienced teacher in the future, and I also had to value the opinions of other colleagues in the school, because they had more teaching experience... The teacher in the class next to mine was friendly and kind and usually gave me many suggestions about teaching.*

When asked to describe what had affected her attitude toward the practice of teaching, she mentioned that she had been very impressed by the teaching of a music teacher at the school:

*I had a chance to see the teaching of a music teacher and found that she usually encouraged or praised her pupils, saying, for example, 'You are all excellent; the best pupils I have ever taught' or 'How can you sing so well so quickly?' My ability in this aspect is far from being enough. I usually handle it in a negative way, when considering how to encourage pupils by using some tactics or skills. This is what I should improve.*

She also stated this in her reflective journal, saying that senior colleagues in her school provided her with ideas about how to teach:

*...Ms Chiang was quite friendly and supportive. She usually provided me with some useful suggestions about how to teach and showed me good teaching designs for certain subjects...*

Her mentor also mentioned that she usually talked to other teachers in the school and developed a good relationship with them.

*...I saw that she usually exchanged her teaching perspectives with other teachers, and this was very good. I was pleased that she contacted other teachers and wasn't restricted to studying with me and my class... It was better to open her mind to other teaching perspectives to help her develop her own...*

When I asked Zhang how she had managed to resolve the teaching difficulties she encountered during teaching practice, she indicated that her teaching had greatly benefitted from the teaching experience of senior colleagues. She copied and learnt teaching approaches and tactics from these teachers and wanted to emulate these teachers:

*I considered that I should take note of experienced teachers because they had a great deal more teaching experience. I know that some student teachers insisted on using their own teaching styles and didn't take advice from senior colleagues. In the end, it was shown that their insistence had been wrong... I thought that, as I was just beginning to teach, I should carefully observe how my mentor managed his classroom and not be too keen to show off...*

When she felt unsure about how to teach properly or wanted to know if there were more efficient tactics to deal with classroom discipline, Zhang exchanged her teaching experience with her classmates who taught in other primary schools. When I asked her about the people she usually looked to for help when worried or anxious, she replied:

*When I had difficulties in teaching, I usually consulted my mentor, or sometimes senior colleagues in the school. It usually happened when I had a problem with preparing teaching materials or with classroom management... Sometimes, I also talked to other student teachers, either in my school or in other primary schools. We exchanged school experiences with each other, usually about how to interact effectively with mentors, pupils, or parents.*



The way Zhang exchanged her teaching schedule ideas with her friends in other primary schools could also be found in the statements in her reflective journal:

*...Yang said that this idea wasn't workable, but I insisted on giving it a try, so that I would know if it would work in my class. If it did, I could use it in my future teaching. Yang then told me that I should ask for my mentor's agreement. After all, this was a rather new teaching tactic, and my mentor might not understand what it was...*

At the beginning of teaching, when she was still unsure how to prepare teaching materials or how to run a teaching session properly, Zhang usually checked with teaching manuals and followed the instructions in these books. Teaching manuals inform student teachers about effective ways to teach:

*It was difficult to make a teaching schedule, so I had to refer to the schedules in teaching manuals... It was awesome. I copied some of them and made some modifications as suggested by mentors. These books also proposed some teaching tactics or skills, so they were quite useful...*

Zhang's mentor advised her to read teaching manuals and these helped her to become more familiar with what she would be expected to teach:

*When she was confused in the beginning about how to teach, she came to me and asked for some suggestions. I told her she should try to understand more from teaching manuals. She could do this in the beginning, following the schedules in the manuals, and gradually, she would learn how to teach better in class.*

Zhang also considered the workshops school leadership held for them useful, because they became a platform for the communication of teaching perspectives and tactics between student teachers and senior colleagues.

*Our headteacher is really considerate and organises workshops especially for student teachers. She usually interviews or has chats with us and asks for whether we need help for our teaching..... When I told her I needed to learn more teaching tactics, she particularly asked some senior colleagues to help me.*

It is evident that, at this stage, Zhang considered the best way to learn to teach was to observe other teachers or ask people how to do it. It was by imitating or copying others' ideas and behaviour that Zhang learnt to be a good teacher. School leadership, senior colleagues and peers played important roles on this process. Zhang's pedagogical content knowledge was still not adequately developed because she still focused on simply copying the tactics other people used and she did not build in knowledge of the pupils. This corresponds with the third stage of my model, as outlined in Chapter 3. At this stage, Zhang mainly focused on learning how to discipline pupils and becoming familiar with the application of teaching tactics. The following two sections will demonstrate how Zhang learnt to cope with classroom management and teaching.

#### **7.4.2 Maintaining discipline in the classroom**

As indicated in Section 6.1, Zhang's mentor particularly focused on managing the classroom and Zhang therefore also paid more attention to this. Like Lin in the previous chapter, at the beginning of teaching Zhang wanted her pupils to obey her instructions, so that she could ensure that the sessions would progress in the expected way. This obviously contradicted her original idea about managing the classroom, as explained in

Section 6.3, which envisioned a harmonious classroom in which the identity of every individual pupil would be stressed. In the interview, she mentioned her attempt to maintain discipline when teaching 'Integrative Activities':

*Frankly, I wasn't satisfied with my performance in this session, because I failed to maintain discipline. I asked the pupils to demonstrate the results of their group discussions one by one, but they didn't follow my instructions and everyone wanted to get in first. I found that some group leaders didn't want to speak, so members of the group rushed to do it for them. Thus, I need to make my demand clearer, and say that if the leader of a group doesn't want to speak, he or she can ask one of his or her members to speak. I may try this in the next session.*

It can be seen that discipline was the most important issue that Zhang had had to deal with at this stage of her teaching. Her teaching preparation obviously concentrated on how to maintain discipline among her pupils:

*Very frustrating!! Like the session today, when the discipline in the nature science session was becoming worse. I don't know if it was because I wasn't strict at the beginning of the session...*

Zhang was concerned about the discipline of her pupils. She found that her teaching pace was unsatisfactory and she considered that pupils' discipline was the relevant factor. Thus, she attempted to look for teaching skills, with a view to keeping the classroom in order:

*...my teaching pace was disrupted and my teaching focus was forced to change. They were noisy, so I had to call their attention back to the content I was teaching by talking about something unrelated to this session. The consequence was that we all became edgy, and this made me particularly exhausted in that session... Thus, I plan to let them write something at the table in advance so that*

*they can concentrate more. Then they can listen carefully and my session can be run efficiently, because they won't have a chance to talk to each other.*

Zhang also tried to use some tactics to control pupils' behaviour in the teaching of other subjects. She mentioned that, when she taught Chinese, she used some skills to catch the eye and attention of pupils:

*When teaching Chinese, it is common to teach new words when pupils have learnt the articles in which those words appear. But some pupils weren't interested when they reviewed the new words, and thus became easily distracted. At the time, they preferred to repeat writing new words. I felt ashamed that they were learning Chinese like this, only understanding new words and their meaning but neglecting to appreciate the whole article. I considered that the best way to deal with this problem was to connect the learning to their everyday lives, which should facilitate their Chinese learning.*

Sometimes, with a view to maintaining classroom discipline, Zhang had to punish some naughty pupils. She also observed the way in which her mentors dealt with these pupils and found that it was useful to apply their methods in her sessions. She mentioned this in the interview when asked what she had learnt from teaching:

*...I do punish them, but I don't use corporal punishment. I do it the way my mentor showed me; for example, making them copy out the words of articles many times. I regard this as being useful to help them to become familiar with the content of the textbooks...*

Zhang also mentioned how she dealt with specific pupils whom she considered regularly violated classroom discipline:

*Zhang: ...I tried some ways to maintain order in the classroom. For example, I found that one pupil was particularly talkative, so I always reminded him, 'What*

*should you do before talking?' Today, I deliberately ignored him and pupils who raised their hands were asked to answer the question instead.*

*Me: So, you let him continue to speak and only asked the pupils who raised their hands?*

*Zhang: Yes. I only gave the chance to those who raised their hands... After several times, I think that boy will understand why he isn't being given the chance to speak... This skill helps me to concentrate on the teaching itself and avoid disruption from pupils who misbehave.*

Zhang focused more on how to develop the skills or tactics to discipline pupils, so that she could properly manage her teaching in the classroom. She recorded this in her reflective journal:

*The discipline in the classroom was good today... The tactics I used to control the behaviour of pupils seemed to work today. I felt they had become a bit more disciplined... but attempts should be made to attract pupils' attention when I am lecturing. This is the aspect I want to improve. I have to look for ways to deal with this... Furthermore, I found that pupils concentrated if I used body language more frequently, along with tools to facilitate and motivate their learning at a well-controlled and lively teaching pace.*

Zhang's mentor also mentioned how he helped Zhang to deal with classroom management. She usually asked him about ways to cope with classroom management efficiently, and she also looked for information about the subject in books and teaching manuals. She tried several ways but found that only some of them were suitable for her and her pupils. Her mentor encouraged her to try different ways of classroom management, even if she simply applied them in the class directly and without any modification:

*She was anxious to find the way out of her difficulty in managing the classroom, not only in terms of pupils' discipline, but also in how to use classroom management to improve their learning. We usually discussed which one was most suitable, and I encouraged her to read more and try more... I found that she used some tactics once or twice and then she gave up. However, she kept some skills she considered suitable to use with the class and continued to use them. I considered this to be the process of learning to teach.*

Zhang thought that not following her mentor's way of classroom management would inconvenience him, so she was reluctant to try her own way. I believe that this hampered her from learning how to manage the classroom:

*...This wasn't my class, so I couldn't do what I wanted... even if I had some different teaching perspectives, I didn't dare express them and thought that I should follow the original way of doing classroom management, rather than deviating from it.*

Tu also mentioned Zhang's concern in the interview and said he had tried to give her more chances and direct guidance on learning how to manage the class, so that she could apply it directly and avoid any hesitation and worries:

*It was unavoidable to some extent that her new way of classroom management would affect my teaching. Thus, I asked her to discuss her preferred way with me, so that I would know how to help her and possibly address the concerns of parents.*

Zhang used many tactics to keep pupils' attention and maintain order, including appropriate punishments, making sessions interesting, and making more use of body language. With the understanding of Zhang's disposition, Tu tended to give her specific advice and this really helped her gradually learn how to manage her classroom. As I mentioned in the previous section, Zhang still had not perceived the need to understand

pupils. She wanted to behave like a teacher who could properly manage a classroom. At this stage, she gained authority in her teaching and she was then able to focus more on the application of teaching skills and tactics. These will be discussed in the following section.

### **7.4.3 Focusing on applying teaching skills and tactics**

Reviewing the previous two sections, it can be concluded that Zhang's learning to teach started to focus on teaching tactics and skills, because she considered that this was the best way to improve her teaching performance and help pupils to learn. She was concerned about her teaching performance in class, and she worried that her unsatisfactory teaching skills could hamper pupils' learning:

*I consider that my teaching performance in the previous session was better, because the teaching pace was properly controlled; however, it was not the same in this session. I found that I had failed to explain clearly enough and had not enabled pupils to gain a good understanding of the content of the lesson. Maybe I need to look for more teaching materials on the internet.*

This consideration was also found in her reflective journal. It seemed that at this stage, all her teaching preparation was being undertaken to ensure that her presentation was appropriate and the pupils' reaction towards her teaching, rather than pupil learning, became her main consideration:

*Maybe I hadn't prepared properly. I found it rather messy when I tried to explain how the session was to be run. Thus, I need to spend more time preparing teaching materials. If I can run the whole session in my mind in advance, it will be better.*

Making her sessions interesting was the most important concern for Zhang at this time. She also wondered whether the pupils could learn well during a session which was boring because of the teaching content. Thus, she wanted to find new teaching tactics and to consider ways to improve her teaching strategy:

*I have to consider how to make the sessions interesting... this session, called 'Recognising Minerals', was boring, because there was no experiment involved. I am thinking how I can make the session more interesting, so that pupils can enjoy learning during the session...*

She also attempted to help pupils to expand their understanding of mathematics by providing them with more difficult questions. Also, with a view to ensuring that pupils understood the questions, she asked them to read them carefully. This is a teaching skill which she applied to improve pupils' learning. In her reflective journal she indicated how she intended to conduct a maths session:

*...I will prepare some maths questions which are a bit more difficult than the ones in the textbooks, and then ask pupils to think of some more answers to them, one by one and slowly, making sure that everyone in the classroom has really understood the questions.*

Zhang also examined her failure to perform well and concluded that her lack of knowledge about the pupils was the main reason. She considered this to be the most challenging issue she had to overcome:

*I felt that I lacked the experience to connect pupils' everyday experiences to the content I taught, so I couldn't properly answer the questions they raised.*



At this time, Zhang looked particularly for teaching tactics in certain subjects, and practised them, because she was concerned about how to teach properly. She mentioned that she had learnt how to manage the session in some teaching situations. For example, in the interview, she indicated how to prevent pupils from being injured in sports:

*I didn't think about doing some warm-up activities at the beginning of physical exercise sessions, but now I see that this was wrong. These activities are important for pupils and different sports have different warm-up activities... I have this idea because I learnt it in the module called 'Pedagogy of Physical Education for Primary School Education', and this was particularly emphasised by my university teacher. I think that I should modify my teaching in physical exercise sessions. Doing more warm-up activities can avoid injury when changing movement.*

A similar statement was also found in her reflective journal, showing that she was concerned over teaching a particular subject properly. In this case, she examined her classroom management performance during a computer class. When she was asked to remember the teaching situation, she said that she had learnt a lot from it:

*I wasn't satisfied with my teaching performance in the computer session and this was my problem in running the session. I considered that if pupils achieved a certain level of progress they could do whatever they wanted to do. But things didn't go as I expected. I found a bigger digital gap between pupils in the class. Some completed the assignments very quickly and played games, but some were still left far behind. The situation was worse because I didn't stick to my teaching principle from the beginning. At that moment I wanted to have a good relationship with my pupils. As a result, the learning progress seriously lagged and the pupils' learning was very limited. This was really my fault...*

Zhang's mentor indicated that she worked hard to look for teaching tactics and contrived ways to use them in class. All his discussions with Zhang were about how to help her to teach more efficiently:

*We usually discussed what would happen and how to react when these tactics were applied in the class. I also gave her suggestions and advice; for example, whether these tactics were workable or not in the class and how they would impact the pupils.*

While maintaining her ideas about how to become a qualified teacher, Zhang learnt tactics and skills about teaching and classroom management from teachers she respected or from teaching manuals. Even though she cared about how to make her teaching more interesting, probably with a view to motivating the learning of pupils, she still failed to tailor her teaching to the needs of pupils. Her mentor was still an important person in her learning of teaching tactics. Another issue Zhang felt was problematic was controlling her emotions when encountering contingencies.

#### **7.4.4 Emotional control as an important issue**

As well as learning how to teach and manage a classroom, Zhang considered it was extremely difficult to control her emotions when encountering many classroom contingencies and she praised her mentor for always staying calm and handling his classroom properly. This additionally showed that one of the important characteristics of Zhang's disposition was her emotional response to teaching.

*I have never heard my mentor speak loudly to his pupils or be strict with them. He is a good-tempered teacher, and, thus, his pupils love him. I consider that teachers are important to their pupils, especially those who find it difficult to learn. Good teaching can make learning interesting and pupils are willing to study in school because they don't feel they are alone.*

Zhang was shocked when she saw her mentor lose his temper with his pupils. She regarded it as a bad example, but she might act the same way as her mentor if she found herself in a similar situation. This kind of behaviour should be avoided:

*My mentor was irritated by the performance of the pupils. He blamed them for being noisy when the natural science teacher was teaching. Worse, a possible theft was discovered in the classroom. I found that my mentor used some words which were inappropriate for pupils, and I learnt from this situation that the words and behaviour of teachers may greatly influence pupils, and the session shouldn't have been delayed because of this event...*

She also wrote about this and her perspectives on it in her reflective journal, and she considered that teachers should behave like teachers and set an example for their pupils:

*It was not just the pupils' naughtiness which made me irritated, but my lack of readiness for this session. I considered that I had not prepared enough and should reflect on this.*

Zhang's mentor also noted that emotion was the issue he usually reminded Zhang about during teaching practice. It was emphasised that teachers should set an example for pupils to follow; therefore, they have to behave properly. Also, they are the educators and should therefore be responsible for teaching in the classroom:

*Sometimes she seemed to be irritated by certain naughty pupils and slightly not in control of the class. She should be more careful about this. Teachers should not be seen to be unhappy. They need to let pupils know that they are still in control of the classroom and the teaching. Thus, pupils will stay disciplined and teaching can continue to run smoothly.*

#### **7.4.5 Considering pupils' needs**

After around three months of the teaching practice period, Zhang began to sense the differences between the pupils in different classes. She was reminded of this by her mentor, other senior colleagues and parents. In her reflective journal, she explained

*My mentor and some senior colleagues told me that I should give myself more opportunities to perceive and understand how pupils thought and behaves, and then guided them to the ways you were expected..... I also contacted with parents to understand their pupils, through telephone or parent-teacher communication books, or when they come to classroom. Parents were happy when I contacted them and some of them gave me lots of information about their pupils. These were quiet helpful for me to understand my pupils.*

Then, with a view to helping her pupils learn better, she understood that her teaching should be designed to suit pupils from different backgrounds:

*...I created and started to make use of a reward board to enhance their expected behaviour. I found this worked well in my class, but it seemed not to work in another classroom when I taught another class. Using this tool there was a waste of time...*

Bearing the needs of her pupils in mind, Zhang looked for more efficient ways to help them to learn. She explained how she did this when she was asked to talk about a situation which had helped her to learn how to teach:

*I found that they hadn't read the questions carefully, so I particularly demanded that they should note the exact questions they were being asked... Today I reviewed the homework that I had asked them to do yesterday and found that they hadn't worked with care. As far as I was concerned, the work I gave them was simple and basic and I believed they could do it well. However, I saw they had made lots of unnecessary mistakes... Thus I decided to stress these points particularly and remind them about them, in the hope that they wouldn't make the same mistakes again.*

She tried hard to connect her teaching to pupils' experience, with a view to motivating their learning and improving learning efficiency. She demonstrated this in her reflective journal:

*Also, I was alert to news and looked for anything that could be an issue I could discuss with them in my teaching... The pupils loved that and they became more aware of what was happening in our society.*

Instead of simply focusing on improving her teaching skills, Zhang began to consider her pupils' reactions to her teaching. She considered that she should bear in mind the everyday experience of pupils when she was deciding how to teach. Another teaching situation was mentioned when I asked her to give an example:

*When I was teaching mathematics, I found that some pupils didn't have a clear concept of time. Unfortunately I couldn't spend more time teaching them this. If I could teach the lesson again, I would put more emphasis on this point, connect it with everyday life, and give them more instances to help them understand it.*

Also, Zhang was cautious about her behaviour and attempted to behave like the teacher she wanted to be. She tried to avoid using language which may have a bad influence on pupils. When asked to remember the difficulties she encountered in teaching, she noted the following:

*I found that I mentioned 'punishment' too many times in the maths session today. Even though they knew I wasn't strict and wouldn't punish them, I regard this as not being the kind of behaviour a teacher should express. I should give them more encouragement... but sometimes it is inevitable to become irritated in class, and say 'I'll punish you...' too many times. Before I say these words, I should stop and think for a few seconds.*

Zhang's mentor praised the fact that she could use her teaching tactics effectively and arrange her lessons in a way that considered her pupils' needs:

*I am surprised that she can understand how to manage these naughty pupils. She has a good relationship with them, but this doesn't have a bad effect on discipline... She can still make pupils stay in their seats and wait for her orders. That isn't easy for a student teacher to learn in such a short time...*

In addition, the fact that she paid particular attention to those who could not keep up with the others and helped them to review the session after class showed that Zhang had not only improved her teaching tactics, but that she had tried to understand how these tactics impacted her pupils' learning. It seemed that at this stage she had started to use her judgement when applying the tactics she learnt from other teachers:

*I was quite impressed with her commitment to teaching... She discovered that some of the pupils were being left behind and asked me if they could stay after class so that she could help them to review the sessions. I think she has been aware of these pupils for a long time, maybe in the class and when reviewing their homework...*

After teaching and accompanying the pupils for several weeks, Zhang found that her original view of pupils was out-dated. These pupils behaved differently in the classroom and were keener to express themselves in class:

*Today's pupils are different. They can't be seen in the same perspective as before. In the past, pupils like us were tame and disciplined and sat there silently and carefully listened to the teachers teaching. If the teacher asked whether we had any questions, we frequently said 'no'. But today's pupils are different.*

In her reflective journal, Zhang indicated that she understood her pupils' level of learning by reviewing their homework. She regarded this as being the best way to see what pupils had understood of her teaching:

*Luckily, I could recognise mistakes when I reviewed their homework, which helped me to prepare the class, because I could revise my teaching plan accordingly. I paid attention to whether or not pupils were concentrating on learning, mainly by whether their eyes stayed on me or not.*

Zhang mentioned that she was satisfied with her teaching performance during the teaching observation. However, she sensed that some improvements could be made. This showed that she was beginning to notice whether each pupil was being properly cared for. When she was asked about what she had learnt most deeply that day, she replied that:

*I was quite satisfied with the teaching observation today; however, I detected that my teaching wasn't good enough. For example, only the first three rows of the class were taken care of, while the others may have been unwittingly neglected. This is where I still need to improve in the future. I hope I will be able to take care of all the students in the classroom.*

Zhang's mentor observed that she had begun to sense the needs of pupils, especially when she attempted to make sense of tactics for teaching and classroom management. With a view to improving the effectiveness of pupils' learning, Zhang tried to match her own learning to pupils' dispositions and modified her teaching by observing their reactions:

*Recently, when discussing the teaching schedule, I found that Zhang had begun to pay more attention to the background and disposition of each pupil. Maybe*

*she had realised that tailoring her teaching to the needs of pupils is the best way to achieve effective learning.*

With the help of her mentor, senior colleagues and parents, Zhang started to develop her understanding of pupils and to consider the needs of pupils when teaching. The positive development in her pedagogical content knowledge can be seen in the examples above. When this sort of knowledge was growing, she gradually acquired more confidence in teaching and, unlike before, became less worried and anxious when teaching. This is demonstrated in the next section.

#### **7.4.6 Confidence in teaching**

After several weeks of learning to teach in school, Zhang was quite confident in controlling her classroom teaching activities and she was managing to keep to her teaching principles. She no longer prioritised maintaining her relationship with her pupils and could maintain her expected teaching pace:

*I became stricter recently and didn't care too much about pupils' opinions of me because, after two or three months, I now know how to deal with them. This has led me to insist on more of classroom discipline...*

Zhang's confidence can also be seen from her reflective journal. However, she still considered that her teaching needed to improve:

*I found that I could keep my teaching under control in the classroom, understand pupils' dispositions, and properly conduct classroom management. You have to give your pupils enough time and space to discuss subjects like Integrative Activities with each other, and then encourage them to express their opinions. Pupils are asked to show respect and listen carefully to those who are speaking. I still need to resort to some teaching tactics; for instance, asking*



*pupils to repeat the main points of my teaching or arranging some activities, like a group competition, to keep pupils' concentration in class.*

On 26 December when asked how he evaluated Zhang's teaching performance, her mentor judged that she felt confident about her teaching and definitely had the potential to be a good teacher:

*Zhang has proved her ability to be a good teacher. Her teaching performance convinces me that it is possible for student teachers to demonstrate what qualified teachers should be within six months. I'm quite proud of her performance.*

Also, he indicated that she could properly cope with contingencies in the classroom and could talk to parents in an appropriate way:

*I find that she is patient with parents and can get her perspective across to them. This isn't easy because some parents are difficult to deal with and quite arrogant... She also coped with the classroom well when I was away. I noticed that even though the pupils love her a lot, they still stay disciplined in the class and avoid irritating her.*

In conclusion, and sensing that her original teaching perspectives had not been workable, Zhang started to make improvement through learning teaching tactics from other teachers, teaching manuals, and other sources. This was the stage when Zhang wanted to behave like other teachers, whose teaching experience she recognised and respected. In addition, I have found that mentors, senior colleagues, and teaching manuals play an important role in learning to teach at this stage. Zhang also began to be cautious about the responses she got from pupils, and she modified her teaching accordingly. Further, by the end of this stage Zhang felt more confident in her teaching

and classroom management. This became the basis for developing her teaching expertise and further applying her university learning to teaching practice.

## **7.5 Thinking strategically about teaching and classroom management**

At the end of December when I interviewed her, it seemed to me that Zhang was starting to form her personal judgements about teaching and to reflect on her university learning. She had entered what I would define as the strategic stage, which was achieved at a time in her teaching practice similar to other student teachers identified as attaining this stage.

### **7.5.1 Flexible teaching judgement**

I also found that Zhang had formed her own personal teaching perspectives in the six-month teaching practice period. In certain cases, Zhang attempted to look for suitable teaching resources for the pupils. She chose her materials based on her understanding of the pupils and of the Taiwanese national curriculum. When I asked her how she prepared the teaching materials for the sessions, she answered:

*I feel that the benchmark for mathematics in the recent Grade 1–9 Curriculum was easier to achieve. In Taiwan, mathematics is regarded as the main subject in the curriculum, so we know whether certain topics in this subject should be emphasised. My tactic is to give pupils some related questions, which have been modified slightly to make them harder. Pupils can learn more by resolving these questions.*

Zhang dramatically changed her idea of teaching after she had experienced her teaching practice. Before teaching, she thought that teaching was simple and did not need any special skills. However, after several weeks, the situation was not what she had expected. She stated in her reflective journal that:

*Having finished the session, on my way home I perceived that teaching wasn't easy. There were many more things to learn apart from teaching from the textbook. When pupils look at you, it's like they're holding a searchlight on you, from top to bottom... This is the feeling of being a teacher, which is very different from the perspective of being a pupil as a child... I was against teaching as a profession before I started to teach, and considered that teaching was a job with a higher social status. However, through teaching practice, I have learnt that things aren't like this... When I could see by their appearance that my pupils were confused by my teaching, I gradually understood that my pedagogical knowledge wasn't enough to be a good teacher. Pedagogical knowledge can't be learnt in classrooms in a short time.*

Zhang mentioned that she disagreed with one senior colleague's method of classroom management and she considered it to be a way that should be avoided:

*One senior colleague at the school implemented corporal punishment quite frequently, but I didn't agree with it. You shouldn't depend too much on this kind of punishment and there are many alternative ways to deal with problems. But she insisted that this was the best way to let them know what was right and wrong, when necessary. I won't be following her style; I will use other ways. Many tactics work and corporal punishment is the worst one... For example, you can reduce a pupil's free time after a session, or ask them to copy out some extracts from textbooks. Some parents may disapprove of corporal punishment. Furthermore, this may probably indirectly hurt pupils mentally and have a bad impact on teacher-pupil relationships. So I will try my best to avoid it.*

Zhang indicated that school managers should maintain their educational authority, rather just seek to please parents. Based on her own teaching judgement, she considered that it was unnecessary to teach English in morning classes before pupils showed basic language competence in Chinese. I consider that this showed Zhang's confidence in her teaching, in that she could demonstrate bravely her teaching perspectives about how pupils learn a language. She mentioned this during the interview:

*Teachers were asked by the head-teacher to teach English in the morning for twenty or thirty minutes for first-graders before all the sessions of the day began. But I don't think this is a good idea. I regard it as a way for the head-teacher to build up a relationship with parents. You can't expect pupils who haven't learnt Chinese well to speak good English... Also, I don't like the textbook we use now; there may be a better choice.*

After being with her pupils for several weeks, Zhang sensed that they were not achieving their potential in relation to their language ability. She considered that good teachers could help pupils to improve their language ability and overcome possible defects in the Taiwanese national curriculum:

*...I feel that it is necessary to practice how to use Chinese proverbs. So if I was a teacher, I would focus on teaching proverbs and sentences... I was surprised to find that the pupils knew a very limited number of proverbs compared with the time when I was in primary school. Some people may blame this on the Grade 1–9 Curriculum, but I am convinced that it depends on how teachers teach. They could help their pupils to learn more...*

Zhang believed that parents should be more responsible for their children's education, and respect the professional expertise of teachers. Even if parents have a higher-educational background, this does not mean that they would be able to teach well. At the end of the teaching practice, she recorded the following in her reflective journal:

*...I'm thinking how I would deal with this kind of situation... I may say that parents should be more responsible for the behaviour of their children. Parents have more time with their children than school teachers... Some parents have various opinions about how teachers should teach. Nowadays, parents sometimes have a better educational background, so they think that they could teach better than you and they make you doubt your teaching ability. This*

*situation is worse if you are a new teacher. Those parents protect their children too much, and when parents ask classmates to forgive the misbehaviour of their children, this can lead to classmates not liking them...*

Tu said that Zhang was forming her own teaching judgement. She had recently begun discussing her teaching perspectives with him:

*...It is quite interesting to come in touch with the minds of younger teachers. She brought me some new teaching perspectives which are rather innovative and a bit strange to me. She insists on using some teaching approaches. I still find some of her ideas to be a bit idealistic, which I can't agree with, even though most of them are more practical now. However, it is good for young teachers to be so passionate about becoming good teachers...*

Zhang formed her own teaching judgement and could make a suitable decision when she dealt with classroom contingencies,

*Today, quarrelling happened in the classroom. Two pupils in one group were nearly fighting in the classroom..... These two pupils were arguing with another two pupils in other groups. I considered that the fighting might affect my teaching and then the learning of other pupils, so this is the suitable way to deal with that..... After separating, two pupils had calmed down when the session finished. I asked them to reflect on their behaviour in the class.....*

Zhang grasped the ways of tailoring her teaching to pupils needs with the growth of her understanding of pupils' dispositions and her pedagogical content knowledge was improving. In the next section, she started to reflect her teaching on university learning.

### **7.5.2 Reflection on university study**

With the encouragement of Tu, Zhang started to read more literature concerning teaching, especially ones she studied when in university. She found that her teaching

perspectives corresponded with the ideas she learned in her university. She mentioned in her reflective journal,

*My mentor told me that I might look back to my universities and saw whether my teaching experience at the moment matched with what I used to learn in university..... This kind of review was wonderful. I found something new I might think about my teaching and the evidence which could support my teaching perspective.*

Zhang mentioned that she had started to think about her university learning when teaching and she examined whether her learning at university matched her teaching experience. In the interview, when I asked her to look back on her teaching experience over the whole teaching practice period, she told me that the university learning had been useful at the end of the teaching practice:

*...Pupils form different groups according to their social background or values. They have different values when making judgements and each group has its leader. Sometimes conflict occurred between groups, and we teachers had to negotiate, which was quite interesting. It reminded me of the sociology of education classes I studied at university which taught us how to deal with these kinds of conflict...*

Zhang repeatedly mentioned this situation when she was asked to analyse her learning experience during the teaching practice period. She spent a lot of time looking at the peer groups in the classroom and tried to use her knowledge of these groups in her teaching and classroom management:

*...In group discussions I deliberately chose pupils from different groups, with the aim of helping them to understand the different values of different groups. This may possibly have prevented some conflict in the classroom.*

Similar statements could be found in her reflective journal. Zhang indicated that in some ways, her teaching followed psychological or curriculum principles:

*It helped me to remember some psychological learning theories. I usually helped pupils to review the content of the previous session, to make sure that they still remembered what they had been taught. This was a bit like teaching in a spiral...*

Zhang's mentor also indicated that, in recent discussions after the sessions or after class, Zhang tended to use her university learning to explain her teaching:

*Sometimes she resorted to educational psychology or sociology to explain and discuss her teaching or describe what she had observed in the classroom. It was very good for her to reflect on her teaching by using some theories she had learnt in college.*

At this stage, Zhang had started to form teaching judgements based on what she had learnt in the past and she began to consider her university learning in relation to her teaching. At the end of the teaching practice period, she knew what kind of teacher she wanted to be.

## **7.6 Conclusion**

Zhang began her teaching practice from her original teaching perspective, anxious about her teaching performance, seeking useful teaching tactics from her mentor, senior teachers and teaching manuals, and, finally, becoming confident in teaching and forming her own teaching judgements. This process again follows the model outlined in Chapter 3: idealism (behaving like the teacher they want to be), the survival stage

(behaving like a teacher who is unsure of how to behave), the tactical stage (behaving like other teachers), and then on to the strategic stage (behaving like the teacher they know they can become).

In the story of Zhang's teaching practice, it could be seen that mentors, senior colleagues, pupils, parents, and the attitude of the school leadership were all factors which influenced Zhang's learning experience. A change in teaching approach can also be perceived in this story. During Zhang's teaching process, her attitude toward learning to teach changed from just simply copying and using teaching tactics in the classroom, to using those tactics while also considering pupils' needs and forming her own teaching judgements based on classroom practice. Her understanding of pupils was improving and then this sort of knowledge was considered in her teaching. The growth of pedagogical content knowledge of Zhang can be perceived in the whole story.

A comparison of Zhang's and Lin's stories reveals similarities and differences. As regards similarities, they both suffered the same teaching difficulties at the beginning of teaching. For example, they wanted their classrooms to be managed properly and were determined to be good teachers, whether by following teaching manuals or by asking people for suggestions. At the end of their teaching, they had formed their own teaching perspectives and had started to think about their university learning. Their stories show the process of learning to teach and match the model presented in Chapter 3. On the other hand, some differences may have affected their learning experiences during their teaching practice. Lin was a rather independent teacher and preferred to work on her own to resolve her teaching problems, while her mentor gave her the necessary assistance. On the other hand, Zhang was more emotional and her mentor had to be



more proactively supportive of her teaching so that she could go through the teaching practice period and achieve a satisfactory result. This shows that the disposition of student teachers plays an important role in their professional learning. Mentors have to understand the disposition of student teachers and supervise with suitable mentoring style if they want to efficiently support the learning-to-teach of student teachers. Lin and Zhang's mentors did this, assisted –perhaps enabled - by a positive school leadership. In the next chapter, I will start an overall review of twenty student teachers and investigate how the factors shown in Chapter 5 affect the learning of all student teachers in my study.

## Chapter 8

### A pen portrait of the remaining eighteen student teachers

This chapter will briefly describe the backgrounds and the schools of the remaining eighteen student teachers. I have included these in the body of the thesis to give the reader some contextual information for the cross-case analysis that follows in the next chapter. The pen portraits are based on my interpretation of data provided in the interviews with the student teachers and the mentors.

#### 8.1 Student teachers who reached the strategic stage

**Ms Chen** taught a class of third-graders in a school of 1,000 pupils in a town in mid-Taiwan with a population of 40,000. Her mentor was Ms Ding, who had more than ten years' teaching experience at this school and had just been awarded an MA degree the previous year. Chen had graduated from an institute of education at a university with a BA degree. She was a devoted but sensitive person, who wanted to be a good teacher in the future. Ding was a supportive mentor. She encouraged Chen to do whatever she thought was right, and not to hesitate. She also encouraged Chen when she experienced difficulties in her teaching. In the following quotation, Ms Chen can be identified as reaching the strategic stage because she started to reflect on her university learning and was alert to the needs of pupils.

*The teaching practice just confirmed what I had learnt at university. Concern for learners played an important role in teaching. In terms of teaching, the ability and the needs of pupils should be taken into account when preparing teaching materials and applying teaching skills. With regard to classroom management, understanding pupils' characteristics helped me to apply teaching skills or group pupils in the class efficiently and properly. (Journal, 10 January 2007)*

**Mr Li** taught a class of sixth-graders at a small school with fewer than 600 pupils in a town in southern Taiwan of around 20,000. He had graduated from an institute of education at a university with a BA degree. His mentor was Ms Chen, a teacher with more than five years' experience and great patience with pupils. Li was full of empathy and teaching potential. He was able to understand easily how to use teaching tactics effectively. He also paid more attention to the needs of pupils. Chen was a supportive mentor. She regularly gave Li useful advice and encouraged him always to reflect on his teaching. Mr. Li achieved the strategic stage because he started to develop his own teaching beliefs and this development focused on his care about the needs of pupils, which is evidenced in the following statement.

*When I taught addition, I tried to connect mathematical questions to the classroom context or to everyday experience, so that pupils could quickly understand how to do it. For example, I told them they were now going to have lunch, so what kind of food were they going to buy? They told me the food they were familiar with and the price. Then I calculated the total price... (Critical incident, 27 December 2006)*

**Ms Wang** taught a class of third-graders at a school with more than 2,000 pupils in a large city in northern Taiwan. Wang had graduated from a four-year teachers' college with a BA degree. Her mentor was Ms Yang, who had recently obtained an MA degree and who had taught in this school for more than 20 years. Wang was determined, patient, and diplomatic. She got along easily with pupils and other senior colleagues and was very enthusiastic about teaching. Ms Yang gave Wang more space to consider her teaching, which suited Wang, who was fond of looking for useful teaching materials and tactics and applying them in the class. This gave Wang more opportunity to practice her teaching perspective and develop her own teaching standpoint. I considered that Mr

Wang reached the strategic stage, because she started to reflect on her university learning, which is showed in the following statement.

*Getting used to the life of a student teacher, I began to think how to make my teaching better and more attractive. Recently I happened to read the material I had studied in university, and I found some useful ideas for teaching, pedagogy and theories I hadn't noticed before. I might use them later on. (Interview, 3 January 2007)*

**Ms Li** taught a class of fourth-graders at the same school as Ms Zhang (see Chapter 6). She had graduated from a teachers' college with a BA degree and was mentored by Ms Chen, who had taught at this school for many years. Li worked hard at practicing teaching tactics and classroom management. She also endeavoured to understand her pupils' dispositions and to tailor her teaching to their needs. Ms Chen was a supportive and responsible mentor. She had frequent discussions with Li and helped her to deal with classroom contingencies when necessary. They were like friends, who talked to each other every day after class. Li also mentioned that the school management team in her school was supportive, since they helped her to prepare for the teacher-training examinations she would encounter a few months later, and did their best to arrange more observation of other teachers' teaching. It can be shown in the following statement that Ms Li has achieved the strategic stage, because she began to reflect on her teaching perspectives and considered her university learning.

*Although the theory was not useful at the beginning, it proved itself as time passed. Having become familiar with the teaching life and then reading through the material, some stuff was quite reflective. It occurred to me that my teaching still needed to be improved. (Interview, 23 December 2006)*

**Mr Wang** taught a class of sixth-graders at a school in a town in mid-Taiwan. He had graduated from an institute of education at a university. His mentor was Ms Zhang, who was studying for an MA at a teachers' college and was quite supportive of Wang's teaching. Wang was a determined, diligent, and practical person. He attempted to improve his teaching during teaching practice and he passed the teacher-training examination. He worked hard to learn teaching skills and asked Ms Zhang to give him more suggestions. He was keen to make a good teaching presentation should he be asked to do so in the future as part of a job application. The statement of Mr Wang provides evidence that he has achieved the strategic stage. He used the theories he learned in university to validate his teaching experience.

*The theories which I had regarded as inapplicable and the academic books which hadn't been touched or read for a long time were found to be useful after I read them again and used them to test my teaching practice; for example, the Pygmalion Effect and the behaviourist theory. These books or theories gave me the some ideas to reflect on, and helped me to improve my teaching practice.*  
(Interview, 14 January 2007)

## **8.2 Student teachers who remained at the tactical stage**

**Ms Hu** taught a class of sixth-graders at a school of 1,000 pupils in a town of 40,000 in mid-Taiwan. This was the same school as that of Ms Chen, and she had graduated from the same institute with an MA degree. Her mentor was Mr Chen, who was studying for an MA and had more than five years' teaching experience. Hu was a practical and gregarious person. I considered that Ms Hu reached the tactical stage, because her teaching stopped at reflection on teaching tactics, rather than on theories or university learning. This is demonstrated in the statement as follows.

*I think it was the attitude of the pupils. Their reaction told me whether they liked the style of teaching I was trying for the first time. Then I would feel happy and*

*think this style was nice and the next time I would try it again. I was happy for a long time, as this teaching style was suitable for them, and it made me think that I could try it another time. If I didn't get the response I expected, I might think about whether my teaching style had problems, or whether I should change it next time.* (Interview, 27 December 2006)

**Ms Huang** taught a class of second-graders at a school of more than 2,000 pupils in a large city in northern Taiwan. This was the same school as that of Ms Wang. Her mentor was Ms Fang, an experienced teacher with five years' teaching experience. Huang had graduated from the same school as Ms Wang, with a BA degree. She was a hard-working, but sometimes stubborn, person. It was only when she experienced great difficulty that Huang asked her mentor for help. Ms Huang's teaching still focuses on teaching tactics even at the end of the teaching practice period. In the statement that follows from her journal, it can be seen that she is still attempting to keep pupils in discipline.

*It is necessary to establish authority, because it is only this that makes pupils accept our words. However, authority should be used with caution. Sometimes you should respect the needs of the pupils. It is not easy to get the right balance.* (Ms Huang's journal, 22 December 2006)

**Ms Tu** taught a class of third-graders at the same school as Ms Wang and Ms Huang. Her mentor was Mr Sun, an experienced teacher who had graduated from a teachers' college and had several years' teaching experience. Tu was an introvert and her pupils found it hard to get along with her. Sun gave Tu a lot of support when she encountered teaching difficulties. I thought Ms Tu achieved the tactical stage, because I found no evidence in her interview or journal concerning her reflection on university learning or genuine self-confidence about her teaching. This can be found in this typical statement when she was asked about her teaching.

*I am quite confident in my teaching because the discipline in my classroom was usually in order and I could teach the same subjects in many teaching approaches. The using of various teaching skills helps me teach well and it seems my mentor is satisfied with this. Pupils are happy with my teaching and this means they can learn well (Ms Tu's Interview, 3 January 2007).*

**Ms Guo** taught a class of fifth-graders at a school with around 1,200 pupils in a large city in southern Taiwan. She had graduated from a four-year teachers' college with a BA degree. Her mentor was Mr Wang, who had graduated from a five-year teachers' college and had taught for more than twenty years. He was studying for an MA degree and was a responsible teacher who always updated his knowledge of teaching. Guo was a sensitive and rather hard-working student teacher. She spent a great deal of time preparing her teaching and worrying about whether or not her teaching performance was satisfactory. Ms Guo is still at the tactical stage, because her teaching still focuses on how to properly use tactics in her class. This can be shown in the following statement:

*It seems that tactics are the most important in the teaching. When familiar with the using of tactics, you can teach well and pupils learn a lot and happy in your teaching..... I think I am quite familiar with those teaching tactics and my mentor praises me a lot. The university learning isn't necessary in my teaching. (Journal, 10 Jan 2007)*

**Ms Liu** taught a class of fourth-graders at a school with around 2,000 pupils in a large city in northern Taiwan. She had graduated from an institute of education with an MA degree and was mentored by Ms Chen, a teacher with more than five years' teaching experience. Liu was diligent, but introverted and inflexible. She cared in particular about giving a satisfactory teaching performance in class. From the statement that

follows, Ms Liu's teaching looks to put most emphasis on the discipline and on the development in teaching tactics. Thus, I put her on tactical stage.

*I think that I should look for more materials concerning teaching tactics and be familiar with how to use them in class. Those tactics are useful because they help me discipline the pupils, make my teaching lively and keep pupils concentrating on my teaching. Moreover, my mentor seems happy to see this (Journal, 28 Dec 2006).*

**Mr Fang** taught a class of sixth-graders at a school of around 1,000 pupils in a large city in mid-Taiwan. He had graduated from a teachers' college with a BA degree and was mentored by Ms Yang, an experienced teacher at this school. Wang had been dedicated to teaching since he became a student teacher. He was a patient and gregarious person, and always paid a great deal of attention to preparing teaching materials and attending to the needs of pupils. Mr Fang is at the tactical stage because he had not started to develop his own teaching beliefs and reflect on the theories he learned in university. This is shown in the following statement.

*The longer I teach, the deeper I was convinced that learning-to-teach only can be learnt in classroom. I learn many teaching tactics and am familiar with them. Pupils are disciplined and the classroom is under control. My teaching is improving and pupils learn a lot. Everything is much better than before..... It seems that the learning in university isn't quite necessary for teaching. (Interview, 22 December 2006)*

**Ms Yang** taught a class of fifth-graders at a middle-sized school in a city in northern Taiwan. She had graduated from a four-year teachers' college and had been awarded an MA degree from the same college. Her mentor was Ms Chen, who had many years' teaching experience at this school and had just been awarded an MA degree at a



teachers' college. Chen was a considerate and supportive mentor. She gave Yang many useful suggestions, especially in terms of teaching tactics and perspectives. Yang was an intelligent and cautious person. Sometimes she was strict and picky in her teaching performances, and this made her hesitate to practice new ideas when she first encountered them. Yang's teaching still focuses on teaching tactics and I found no evidence in her interview and reflective journal that she had started to develop her own teaching beliefs. The following statement is a good example to show this,

*...I asked my friend in another school how to teach this session, because she had taught the same thing last week. It was useful to ask her opinion, so that I could modify my teaching schedules. In addition, I asked another colleague about her teaching experience. She said that teaching was like conducting a drama. You have to create a good connection between the two parts and let pupils know you're stepping into the next part of teaching. The link between the two shouldn't be too abrupt... (Interview, 22 December 2006)*

**Mr Yang** taught a class of sixth-graders at a school in a town in southern Taiwan. He had graduated from an institute of education at a university. His mentor was Mr Chen, an experienced teacher with more than thirty years' teaching experience. Chen considered that student teachers should know how to maintain order in the whole classroom, so that they could concentrate on teaching well. They should try their best to understand pupils and use this knowledge while practicing tactics in teaching and classroom management. Yang was a confident and practical person. He learnt quickly and used classroom tactics effectively. These became his learning focus. In the following statement, it is evident that Yang still considered tactics were the most important in learning to teach. This meant that he remained at the tactical stage.

*I think teaching tactics are very important in the teaching. Good teachers with many tactics can deal with properly teaching and classroom contingencies. My*

*mentor is really a good model. I found he can use his teaching tactics to make the class more lively..... (Mr Yang's Interview, 10 January 2007)*

**Ms Wu** taught a class of second-graders at a big school in a large city in northern Taiwan. She had graduated from an institute of education at a university with a BA degree. Her mentor was Tseng, who had obtained a BA degree and had ten years' teaching experience. Wu was academically competent, but was shy and dependent. This caused her to be unsuccessful during teaching practice. She usually resorted to her mentor for advice about how to teach, concerning how to use tactics she learned into teaching practice and felt that she lacked confidence in teaching. Wu mentioned an example of how she learned to teach. This evidenced that she was still at the tactical stage in the later period of teaching practice.

*This usually happens when I am attempting to learn how to teach Chinese properly. I am afraid I might miss something I have to teach, so I make notes everywhere in my textbooks. The mistakes pupils made usually showed up in their homework. Thus I was able to prepare my teaching materials after class and make improvements in the teaching of my next session. (Interview 7 January 2007)*

### **8.3 Student teachers who remained struggling in surviving stage**

**Ms Yeh** taught a class of second-graders at a middle-sized school in a city in northern Taiwan. This was the same school as that of Ms Yang, and she had graduated from the same college as Ms Yang with a BA degree. Her mentor was Mr Huang, a teacher with several years' teaching experience. It seemed that Huang's freestyle way of mentoring did not suit Yeh, who needed more concrete instruction. Huang gave Yeh more space to consider her teaching at the beginning of teaching practice. He believed that teaching expertise should be gradually developed over a period of time and through

trial-and-error, and he believed that Yeh would come to him when she had any problems. However, even at the end of teaching, Yeh still felt she was struggling in her teaching. This is shown in the following statement.

*I have no ideas of how to teach. My friends told me that I could learn from my mentors about the tactics he used in classroom. It looks to work when he was teaching or when he was in the classroom. But it didn't work when I was teaching. I told to my mentor, but he didn't think it was a problem, and could be improved in the near future. However, it is near the end of the period. I feel quiet depressed (Interview, 22 December 2006).*

**Ms Fu** taught a class of fourth-graders at a school of around 1,200 pupils in a large city in southern Taiwan. This was the same school as that of Ms Guo. She had graduated from a four-year teachers' college with a BA degree, and was mentored by Ms Peng, a teacher with five years' teaching experience. Lin was hard-working, but less confident at interpersonal relationships. Thus Peng did her best to help her; for example, she told her the characteristics of some specific pupils, and advised her how to deal with them and invited her to birthday parties with some pupils. However, the pupils found it difficult to speak to her. She tried her best to improve this situation, but seemed not to have succeeded very well by the end of her teaching practice. In the following statement, Fu felt unconfident in her teaching and did not know how to teach properly. She can be considered as reaching only the survival stage.

*Ms Peng is very kind to offer the help I need in teaching. She advises me how should I treat certain kind of pupils. But I feel kind of difficult in talking to my pupils. They seem to try to avoid me and show confusions towards me. I also looked for some skills which might help me improve the situations. Nonetheless, all seem to be in vain. I am kind of anxious because I have to teach alone in the classroom in the future (Interview, 7 January 2007).*

**Ms Tzeng** taught a class of third-graders at the same school as Ms Lin (see Chapter 5). She had graduated from an institute of education at a university. Tzeng's mentor, Ms Zhang, was a teacher who had more than ten years' teaching experience. Tzeng was an introvert and lacked confidence in teaching, even though Zhang was quite supportive and considerate. Tzeng's teaching performance was unsatisfactory. In the following statement, at the end of teaching practice period, Tzeng was still struggling in teaching and this meant that she was still at the survival stage.

*Whenever I saw how Lin talk about her teaching, I feel doubtful whether I am suitable for this career. Ms Zhang is supportive. But I don't know why my teaching is so unsatisfactory. Teaching isn't difficult, but for me it's not easy. It is near winter vacation, but my teaching is still not well. When I was teaching, I felt nervous and didn't know how to properly deal with it (Interview, 14 January 2007).*

**Mr Guo** taught a class of sixth-graders at a school with around 2,000 pupils in a large city in northern Taiwan. This was the same school as that of Ms Liu. He had graduated from an institute of education with a BA degree and was mentored by Ms Hsieh, a teacher with more than five years' teaching experience. Guo was a practical person and saw teaching as a second choice of career. Hsieh was a hands-off mentor and did not pay too much attention to Guo's teaching. Since Guo just wanted to pass the time, he did not care about his teaching performance. In the statement below, it looks that Guo has lost confidence about teaching. He does not have any idea about how to teach, even though he had asked for the suggestions from experienced teachers.

*I think my teaching is a disaster. I have tried my best to be a good teacher. I consult many experienced teachers and peers about how to teach. However, those seem suitable to them, but not me. When I was teaching by the suggestions they gave, it seemed not workable. Pupils usually lost their concentration to my*

*teaching. So was their discipline in the class. I really need someone to let me know how to teach* (Interview, 10 January 2007).

In this chapter, I categorised the remaining eighteen student teachers according to their teaching in the teaching practice period. In addition, the quotations from the interviews and reflection journals are applied as evidence to explain the reason I put each of the student teachers into a certain category, as I have defined these categories. As I have commented on before, it is possible that other researchers may have placed some of the borderline cases in different categories. However, I am confident, albeit tentatively expressed, that my data suggests this type of categorisation and the reasons why student teachers move, or do not, through the stages of the categorisation. Student teachers at the strategic stage start to develop their own teaching perspectives, reflect on their university study and tailor their teaching to pupils' needs. Those at the tactical stage focus on learning teaching tactics and those at the survival stage do not know how to teach and have lost confidence in teaching. In the next chapter, I will demonstrate the learning experience of all twenty student teachers.

## **Chapter 9**

### **Overall review of the learning experience of twenty student teachers and the changes in their teaching beliefs**

The case studies presented in Chapters 6 and 7 told the stories of two student teachers, who successfully learnt to behave like teachers during their teaching practice period. The factors that determined the success of their learning and teaching emerged in these two case studies and then are further illustrated when all twenty case studies are reviewed. Further exemplified is how these factors influence the learning of student teachers and the development of their pedagogical content knowledge. This addresses my first research question one, namely which factors enhance or hinder the professional learning of these Taiwanese primary phase student teachers during the teaching practice period.

In addition, these two case studies also show that their development in learning to teach can be divided into four broad phases influenced by these factors, even though the details of their experience differ: these are the idealist stage, the survival stage, the tactical stage, and the strategic stage. In the idealist stage, student teachers hold their original teaching beliefs, mainly influenced by their experience of teaching, no matter on the vanguard of pupils, students, and their personal background, because they have never been in a classroom to face so many pupils. In the survival stage, these student teachers feel shocked by the situations they encounter, they feel unsure and struggle with their teaching. In the tactical stage, most of the student teachers attempted to address their situations by following the suggestions and advice that other experienced teachers or peers provided. At this stage, they simply consider the tactics they learn from others that are useful in teaching. Reflection on theories is unnecessary. In the

strategic stage, some of the student teachers started to reflect on the theories they had learned at university and developed their own teaching perspectives. In the previous chapter, by showing the evidence of how I categorised the remaining eighteen student teachers and two case studies, most of the student teachers were found to have passed the survival stage and to have reached the tactical stage, but only seven of them (including Lin and Zhang) appeared to have gone beyond this into strategic stage. Others may have felt confident in learning, but had not stepped into reflection or were still looking for a comfortable teaching style. Five had failed to get even this far and remained stuck at the survival stage. This aspect of the findings addresses my second research question, namely how these factors influence their development as beginning teachers and their broader learning experience.

The purpose of this chapter, therefore, is to provide additional evidence to the two individual case studies regarding, first, those factors that aid the professional learning of student teachers and, second, how these findings fit, or not, with my theoretical model of student teacher professional learning. As in previous chapters, the following sections contain data collected from interviewee transcripts, from student teachers and mentors, and from reflective journals. A critical incident technique was also employed.

## **9.1 Idealist Stage**

In the two in-depth case studies, it was noted that Lin's original teaching perspectives had been influenced mainly by her religion and Zhang's by her sports coach. Similarly, the other eighteen student teachers all had original teaching perspectives, which were affected by their university learning and personal background and disposition.

### **9.1.1 University learning**

As noted in the literature review, at the beginning of the teaching practice period, when student teachers have not yet had classroom teaching experience, they are liable to have an image of teaching based on personal experience of being a pupil (and in some cases, of having other teachers in their families). Data from the remaining eighteen student teachers gives similar findings.

In Taiwan, pedagogical courses in universities prioritise the concerns of learners. These courses help student teachers to understand how pupils think and behave, and how to manage the classroom and teach effectively while remaining learner-centred. Ms Wang recounted what she had learnt at university about planning to teach and manage her classroom:

*I learnt some teaching skills at university. For example, we may be able to motivate pupils to learn by showing interesting pictures, telling relevant stories or jokes, and by reviewing what pupils have learnt. In terms of classroom discipline, we could appropriately use a 'token system'; when a pupil behaved well, he or she was given one point and if he or she behaved badly, one point was deducted. This could discourage misbehaviour and encourage pupils to behave well. (Interview, 13 October 2006)*

Ms Wang described her learning at university about how to understand why pupils are disobedient:

*I thought that pupils expressed weird behaviour because they wanted to get the teacher's attention. If we ignored them, we could probably discourage similar behaviour. (Interview, 5 November 2006)*

The mentors also noted the impact of university learning on the original perspectives of student teachers. According to Ms Ding:



*I find that student teachers usually have their own teaching ideas when they begin to teach, and when I talk to them, I realise that these perspectives are learnt mainly from university and their own experience of school. Although university training does give them some ideas about how to teach, the ideas aren't practical and student teachers interpret and try to apply them in an idealised way. Their experience of school affects their teaching perspective and their role as a teacher... (Mentor interview, 23 December 2006)*

Another mentor, Ms Yang, had a similar perspective:

*...When she first began to teach, Wang [her student teacher] had obviously been affected by her university learning. She sympathised with the pupils, and insisted that they shouldn't be forced or disciplined, but should be motivated to learn, which was really unrealistic... (Interview, 13 October 2006)*

### **9.1.2 Personal experience**

Student teachers' images of teaching may also be influenced by other significant figures. In Zhang's case, as discussed in Chapter 6, her image of a 'good teacher' came from remembering her sports coach. When reviewing the other 18 student teachers, it was clear that their teaching perspectives had come from their experiences as pupils. They may have suffered from a particular teaching style when they were pupils or students. They thus attempted to avoid such styles of teaching when they began to teach. Ms Huang indicated that she had had a negative experience in higher education institutions:

*I disliked the teachers who muddled along with their own class... a kind of lazy teacher, who didn't prepare their teaching. You didn't know what they taught or how they evaluated your learning... Some teachers like this might ask students to do a group report, to kill time. When the exam was approaching, they would give us a pile of papers and say, 'This is what you are going to be tested on.' It was really meaningless. We forgot everything after the exam was finished. I really don't want to be that kind of teacher... Good teachers should continue*

*their studies to improve their teaching and professionalism.* (Interview, 8 October 2006)

The learning experience has great impact on the formation of the teaching image. Wright and Tuska (1967) apply Mead's theory of symbolic interaction, indicating the influence of 'significant others' on beginning teachers. 'Significant others' in the lives of student teachers will have impact on their image of teaching. It can be understood from Ms Huang's statement that her university teacher left her with a negative example of teaching. Another example was provided by Ms Fang, a school mentor, who suffered much from a high school teacher who over-emphasised the importance of academic performance:

*He really paid lots of attention to academic performance. This was very obvious when you found that your seat was arranged according to the scores you got in the exam. After the exams, those who got a higher score were put in the front [of the classroom]; others were placed at the back. I was usually put at the back. Such behaviour made you think you should be ashamed of getting a lower score. There may have been a relationship between your academic performance and your ability; nevertheless, sometimes when you had really endeavoured to study and got a score you did not expect and were treated like this... I remind myself of this situation again and again and wonder how could I have had a life like this in high school...* (Interview, 22 December 2006)

Ms Wang indicated that a teacher in her secondary school had set a good example and that this had made her decide to be a good teacher:

*I remember he was friendly and responsible. What impressed me most was that he was a good listener and liked to understand what students thought. He helped us to solve problems when we came to him and I found he always gave us good suggestions. I try my best to be this kind of teacher and hope my student teachers will be like this.* (Interview, 13 October 2006)

Ms Li's unhappy learning experience could be traced back to her teaching ideas at high school. As a reaction against it, she considered that teaching should not just focus on academic performance, but should place more emphasis on learners. Student teachers' image of teaching prior to classroom practice tends to be 'learner-centred'. They think that teachers should help students to develop their potential and that the learning process should be voluntary. This idea accords with university learning in teacher education, which considers the learning process from the perspective of individual learners. However, in Taiwan, this idea is usually in conflict with mainstream society's expectation of teachers. Parents are usually concerned about the academic performance of their children and want to see their child pass examinations and receive an outstanding evaluation. Therefore, teachers are constrained to work hard on the academic performance of pupils. They have to keep their teaching strategies balanced between academic performance and a learner-centred approach. In this way, it can be seen that student teachers are idealistic in their image of teaching if they do not consider the performance of their pupils.

In addition, student teachers in Taiwan must be graduates of higher education institutions, and this means that, when they themselves were at primary school, their academic performance would have been above average. Thus, student teachers are liable to build their image of teachers based on the perspective of strong students. This image can be unrealistic as they are faced in the classroom with pupils from different backgrounds and abilities. During the interviews, one mentor, Mr Huang, gave an example of this:

*I remember Li [his student teacher] mentioning that she wondered why a certain topic should be taught over two or more sessions. She said it would be hard for her to utilise two sessions [80 minutes] just to teach this kind of thing. I think that it was natural for her to have an idea about how to teach just from her learning experience... (Interview, 23 December 2006)*

Another mentor, Ms Chen, observed that student teachers still lacked teaching experience and did not have a clear idea about how pupils learn:

*I think I was same as Yang when I was a probationary teacher. It's unavoidable to think in this way [judging pupils' thinking by one's own learning experience]. After teaching several sessions and interacting with pupils, I think she started to perceive the difference. Some pupils may be as clever as you were, but those who fall far behind the expected progress may think in a different way. (Interview, 22 December 2006)*

At this stage, as Lin and Zhang stated, student teachers hold the original teaching beliefs based on their learning experience at school or university. Their beliefs were unrealistic and might be problematic when unpractised in an actual classroom. Student teachers did not have any experience or practical knowledge concerning pupils at this moment.

'Significant others', personal experience at school and formal education all have an impact on the teaching image student teachers build before they begin teaching. Student teachers construct their teaching image from ideology acquired in formal teacher education in higher education institutions. Personal experience as pupils possibly allows them to build diverse images of teachers. Also, no matter whether positive or negative, 'significant others' inform student teachers about the sort of teachers they want to be in the future. Their initial image of teachers is thus composed of their

university learning and personal experience. When stepping into the classroom, student teachers find that the real teaching situation is not what they expect, and this will be demonstrated in the next section.

## **9.2 The survival stage**

As noted above, formal teacher education in Taiwan instructs student teachers that learners should be their first concern in teaching. In addition, student teachers shape their teaching model from their own childhood school experience, and ‘significant others’ strongly influence their image of teaching. After at least one month observing teachers, student teachers begin to face the reality of the classroom. They have to learn how to take charge of the whole class and to cope with classroom management and teaching matters. When beginning to teach, these student teachers struggle to deal with teaching practice and disciplining pupils and unsure about how to teach. This was seen in the Lin and Zhang case studies.

Disciplining pupils is the challenging issue most frequently mentioned by student teachers when they first begin to teach. At this time, and because of their learner-centred ideas, student teachers place a high value on having a good relationship with pupils to achieve effective classroom management. However, after no more than a week-long honeymoon period with pupils, they realise that pupils cannot be disciplined and their classrooms cannot be managed or operate well in this way. Ms Guo mentioned her experience:

*I tried to make my class more lively and lovely. In the beginning, it went well... [but] it got worse; then, it nearly got out of control. I attempted to gain control of my class but it seemed to be so difficult. (Interview, 23 October 2006)*

Similarly, Ms Chen indicated that she found it difficult to discipline pupils. Even though she had learnt how to manage a classroom at university, she said that putting knowledge into practice is another matter:

*Although I tried to use what I had learnt at university, I wasn't able to control the class as effectively as I had expected. Everything was in a mess. I was worried. It occurred to me that maybe I could copy the ways my mentors employed, because they seemed successful [in dealing with that problem].*  
(Interview, 8 October 2006)

In terms of teaching practice, student teachers could usually understand the teaching content without any difficulty. However, they find it challenging to convey what they understand to their pupils. When first teaching mathematics, Ms Wang found that the content was not difficult. Nonetheless, soon after she finished her teaching, she perceived that what she had taught had not been properly understood by her pupils:

*I couldn't find the points to teach in, for example, the maths textbook. At the beginning of my teaching, my mentor told me I ought to teach two pages at a time and I said, 'Really? Only two questions? Two questions about addition in 40 minutes of teaching?' When the class finished, the pupils were confused, and I thought, 'What happened? I have taught two examples. Why don't they understand?' Then I felt confused... I could understand the mathematical content very well but transferring it to my pupils was another matter.* (Interview, 13 October 2006)

Lin had showed she had a similar problem when she said that she could not control the pace because she lacked an understanding of pupils' prior knowledge of her teaching materials, while Zhang had indicated that her lack of knowledge of pupils' dispositions caused her to fail in classroom management. In addition, the student teachers found

their teaching ineffective because when they were preparing to teach they still could not grasp the essence of how to express lesson content to pupils. Ms Chen discussed this:

*I thought the range of content was huge. One unit could possibly be divided into four or five sections. [At the time] I didn't know which content I should emphasise. If I taught like this, my pupils would definitely not know how to learn. Then I began to worry whether it was difficult for the pupils to learn, or whether I could get my ideas across to them. (Interview, 11 October 2006)*

It can be seen in the previous quotations that these student teachers considered the reactions of pupils as the criteria to judge whether their teaching performance was satisfactory. As I articulated in chapter five, I also found that the style of mentoring and the dispositions of student teachers might determine the teaching experience of student teachers in their teaching practice period. The two examples below exemplify this well.

Ms Yeh was an introvert. However, she was paired with a hands-off mentor. This led to her always struggling during teaching practice period.

*My mentor seemed not to care about my teaching and seldom gave me useful suggestions. I have no ideas of how to teach..... My friends told me that I could learn from my mentors about the tactics he used in classroom. It looks to work when he was teaching or when he was in the classroom. But it didn't work when I was teaching. I told to my mentor, but he didn't think it was a problem, and could be improved in the near future. However, it is near the end of the period. I feel quiet depressed..... My mentor was very busy and I couldn't find the time to let him know my trouble with teaching. I'm really struggling (Interview, 22 December 2006).*

Mr Li was also an introverted person and never talked to others actively. However, his mentor was supportive, always alert to his teaching and gave him good advice. He considered that he was lucky to have a mentor like Ms Chen.

*Ms Chen was kind and gave me much support when I was struggling in my teaching. When I was anxious and worried, she encouraged me and comforted me that it was natural to have this kind of teaching experience at the beginning and things were better in one or two weeks time. In addition, she gave some good advice in teaching and classroom management (Reflective journal, 15 October 2006)*

Because of their failure at classroom management and teaching at the beginning of learning, student teachers were dubious about whether what they learnt at university could be applied to teaching practice. Also, they were unsure in how to deal with the difficulties in teaching and classroom management, simply anxious and worried whether they could survive through teaching practice period. They began to look for useful tactics in classroom management and teaching from their mentors, senior colleagues, other student teachers, teaching manuals, or other useful sources. This can be seen in the next stage.

### **9.3 The tactical stage**

After struggling with teaching performance and classroom management, fifteen of the twenty student teachers, including Lin and Zhang, progressed to the tactical stage, during which they reflected tactically on the teaching skills they had learnt, mainly from senior colleagues and mentors, and began to consider the needs of pupils. At the end of the teaching practice, they were found to be confident in their teaching. The learning experience of these thirteen student teachers will be discussed in this section.

#### **9.3.1 Imitation and copying tactics in teaching practice**

With a view to overcoming the struggle at the beginning of teaching, student teachers developed teaching tactics and skills to improve their teaching. For example, they



sought to establish teacher authority and to follow closely the teaching methods provided in teaching manuals and the teaching skills of other senior colleagues. In terms of coping with classroom discipline, they were taught at university that it was important to impose their authority in the classroom. However, they were doubtful about the effectiveness of this method. They began to take the view that exerting their authority was no more than forcing or threatening pupils to follow their teaching. Two examples can be provided that explain this situation. Ms Chen's and Ms Wang's respective mentors suggested that they should establish their teaching authority and behave like professional teachers:

*My mentor told me I had to remember that I was a teacher. I didn't come here to be a 'king of children'. I am a teacher and I am responsible for cultivating these pupils, so I need to show my authority. (Ms Chen's interview, 7 November, 2006)*

*If I didn't impose my authority, my teaching would be regarded as nothing; discipline would not be maintained in the classroom, and teaching would not be properly carried out. (Ms Wang's interview, 11 October 2006)*

Thus, the student teachers began to think about developing these kinds of skills and tactics, mainly by observing the teaching of mentors or senior colleagues and copying them in their teaching practice. Mr Wang indicated that he had attempted to copy his mentor's style of keeping the classroom in order:

*In terms of discipline in the classroom, my mentor didn't ask pupils to be always quiet, or punish them when they failed to behave properly. Instead, she paid attention to developing pupils' personalities in a good way, rather than focusing too much on their academic performance. She tried to build her image of authority in pupils' minds and spent a lot of time correcting pupils'*

*misbehaviour and asking and encouraging them to obey class rules. (Interview, 10 November 2006)*

Student teachers also attempted to resolve difficult situations by continuing to use teaching tactics from the previous stage. Just like Lin and Zhang, they mainly copied and imitated people they recognised as being skilful and experienced teachers. Mr Li was impressed by the teaching of his mentor, Ms Chen, and when he was asked about the process of learning to teach, he said he wanted to apply her teaching style to his own teaching:

*When teaching Chinese, I found that Ms Chen flexibly used many kinds of activities to attract pupils' attention... When teaching natural science, she tended to take pupils outside, rather than having lectures in the classroom. Her approaches and tactics are worth learning. (Interview, 16 October 2006)*

In the interview prior to the teaching sessions, Mr Li mentioned that he also adopted Ms Chen's suggestions for teaching. After the teaching practice I asked him to relate a situation he that he remembered:

*I had thoroughly discussed my teaching schedule and the tactics I was going to use in the session with my mentor, and she gave me some suggestions about how to implement them. I followed all of them in my session and knew that it would be fine because I had done everything I could do... (Interview, 11 October 2006)*

Not only did student teachers try to resolve their teaching difficulties by requesting advice from experienced teachers; they also looked for concrete instructions in teaching manuals, which were considered to be very effective guides to teaching certain sessions. These resolutions were similar to those adopted by Lin and Zhang in their stories of

learning to teach. Ms Guo described in her reflective journal how she tried to resolve her teaching difficulties:

*I felt it was difficult to teach maths. Because it seemed very easy when we read the textbook, we didn't know how to present it properly to pupils in 40 minutes. It was better to read the teaching manual and do what it said... (Journal, 16 October 2006)*

Ms Li outlined the approaches she applied when learning to teach, which were mainly to follow the instructions in the teaching manual and the suggestions of senior teachers to produce her teaching schedule, which she then modified slightly by referring to the teaching and classroom management of her mentor. When asked for an example of how she prepared to teach, she said that:

*...you ask me how I taught. I wrote the learning targets in the schedule and the way I taught was similar to my mentor's way. I copied her teaching style and pedagogy, like motivating the pupils to learn, pre-reading the essay, reviewing new words, making sentences, exploring the essay, and giving written homework and tests... My mentor tends to ask pupils to look up and practise new words which have been taught in the session. I followed her way to learn how to teach... (Interview, 8 October 2006)*

The two mentors confirmed the ways student teachers used to face their teaching difficulties. They indicated that, at this stage, student teachers needed concrete suggestions to resolve problems, and they usually looked to mentors, senior colleagues, and teaching manuals as their main resources. Mr Wang, who mentored Ms Guo, remembered how his student teacher resolved her difficulties when she began to teach:

*...She looked for useful information, whether from her friends, other teachers, teaching manuals, or stuff from the internet. She asked me to describe how to*

*cope properly with the situations she encountered and wanted to apply them to her teaching... (Mentor interview, 7 January 2007)*

Ms Chen, who mentored Ms Li, also mentioned something similar:

*She worked hard to find solutions and then discussed them with me and applied them to her teaching... I found that she also made notes when she observed me teaching. She wanted to know exactly what I taught and how I coped with pupils' behaviour in the classroom. (Mentor interview, 14 January 2007)*

I suggested in chapter five that copying the teaching styles of mentors and senior colleagues was the tactic that student teachers adopted when they encountered the initial difficulties. They had not developed sufficient knowledge about pupils and were yet to sense the possibilities to tailor their teaching to pupils' needs, much as had been the case with Lin and Zhang.

### **9.3.2 Reflecting tactically on teaching practice**

As with Lin and Zhang when they were learning to teach, the other student teachers, with the exception of the five who failed to reach this stage, were found to have engaged in tactical reflection. Their reflections at this stage focused mainly on how to apply teaching tactics properly to teaching practice and to improving teaching performance. Mr Lin provided explicit details of how he had improved his teaching skills by thinking tactically, and by the effective organisation of teaching activities and maintaining his teaching pace. When he was asked to demonstrate a particular situation which had taught him a lot during the teaching practice period, he explained that:

*I finished the sections entitled 'motivate pupils' learning' and 'read article' in ten minutes... and followed this with a motivation section, in which I asked pupils to read an article five times. I had to maintain discipline in the classroom,*

*and this took me 30 minutes in total. I then asked pupils to practise the new words in the article in the final ten minutes. If I had not taken time to manage the classroom, it would have been a mess... In the following session, I asked pupils to make sentences using the specific patterns shown in the article, and this took a total of two sessions... (Interview, 17 October 2006)*

Similar to Mr Lin's situation, Mr Yang mentioned in his reflective journal how he learnt the tactics of teaching. He maintained his teaching pace between sessions, made his teaching more flexible by not being restricted to following the schedule, and adapted his teaching whenever he thought it necessary:

*...The mentor mentioned that the teaching pace could be flexible, but if I wanted to add extra content to my teaching, I would have to spend more time on it. I found that this was true. When I spent too much time teaching the first part of my teaching schedule, I didn't have enough time for the next part. So I had to choose the teaching content. The most important things were taught first, and then, if I still had time, I could teach more. Otherwise, I could teach other things in the next session... (Journal, 15 November 15 2006)*

Ms Yang focused her learning on how to improve her teaching skills, and stated that her friends in other primary schools and other colleagues had given her useful suggestions for teaching tactics. This showed that, at this stage, Fang's main concern was learning useful teaching tactics. She mentioned this in her interview:

*...I asked my friend in another school how to teach this session, because she had taught the same thing last week. It was useful to ask her opinion, so that I could modify my teaching schedules. In addition, I asked another colleague about her teaching experience. She said that teaching was like conducting a drama. You have to create a good connection between the two parts and let pupils know you're stepping into the next part of teaching. The link between the two shouldn't be too abrupt... (Interview, 22 December 2006)*

In addition, Ms Wang mentioned in her reflective journal how she resolved her difficulty in teaching mathematics at the beginning of teaching. She considered that she could benefit from the teaching of her mentor:

*...the last mathematics session was a disaster. Although I know how to prepare adequately to teach, it's important for me to observe how my mentor teaches the related sessions ... Thus I can know roughly what I should teach in the next session, and how I should teach it... (Journal, 20 October 2006)*

Furthermore, she also mentioned that she benefitted from the workshops held by the school leadership. This provided Ms Wang with the chances to exchange which tactics were useful and how they could effectively be implemented in the classroom. This is a good example of my overall finding as to the importance of school leadership in developing student teacher's professional learning.

*I met several senior colleagues and other student teachers in the workshop. We student teachers demonstrated our teaching experience and our teaching perspectives. Senior colleagues and school leaderships exchanged their perspectives with us. I found that was very useful (Interview, 22 December 2006).*

The first concern of student teachers at the beginning of teaching was whether or not they could run their sessions properly. They rarely mentioned how to help pupils learn efficiently by tailoring their teaching to pupils' disposition. Mr Wang described what he learnt in the third week after his teaching practice period started:

*It is important to present my teaching in every session now, so I find difficult to deal with individual pupils. For example, I found that one pupil wasn't concentrating on learning. I chose not to punish him because wasn't disrupting my teaching. I regretted it after the session, but I considered that it was all I could do at the time. (Critical incident, 25 October 2006)*

Even when these student teachers did reflect on their teaching, their reflection was restricted to immediate teaching tactics. Its purpose was to learn how these tactics were applied into teaching and classroom management with personal teaching perspectives and the practice of 'reflection-in-action'. Their pedagogical content knowledge was still not yet properly developed because they still did not pay enough attention to the needs of pupils and lacked knowledge concerning pupils.

### **9.3.3 Thinking about pupils**

The student teachers began to sense that they had an insufficient understanding of pupils' needs, and that this was why, unlike their mentors, they could not properly deal with classroom contingencies. They did not understand what pupils were thinking and why they were behaving as they did. Ms Wang attempted to help her pupils to be more responsible, but her efforts were wasted:

*Once they made a mistake, they tended to blame it on each other. I felt that this situation was getting serious. I knew I could not change their attitude simply by dictating to them, and I really did not know how to get my thoughts across to them. All I could do was to let things happen and explain orally what was happening while keeping them calm. But I was not sure that the same thing wouldn't happen again next time. Sometimes I felt really frustrated. (Interview, 3January 2007)*

Mr Li expressed a similar concern about his lack of knowledge of the pupils. He worried that he could not correctly handle the contingencies which occurred around him:

*Frankly speaking, I don't know how to deal with them in the right way. Should I be strict? I think my mentor understands the characteristics of the pupils and*

*deals with everything accordingly. But I really don't have the sense to handle everything that happens. (Interview, 27 December 2006)*

Given that student teachers have just begun teaching, they are unlikely to understand their pupils in such a short time. Ms Hu confessed that she had failed to gauge correctly the personalities of her pupils, which she explained by recounting an example about when she had tried to resolve a conflict in the classroom:

*I thought that good teachers had to be very sensitive and sympathetic and understand their pupils' characteristics. Take today's situation, for instance: I really cared about the pupils and let them get as emotional as they wanted to be. I also didn't pay much attention to this in the afternoon. You have to handle events in a way that you not only see what is happening, but also who made it happen and when it happened. This approach enables you make a correct judgements and keep the situation under control... I taught in a low-grader class, and at this age pupils were fond of stating their opinion, whether about important or insignificant things. When they spoke to you, you had to deal with them. Sometimes the issues they told you about were extremely trivial and they asked you to make a judgement. I found it difficult to create my own standard to handle such situations, so I asked my mentor. I was surprised that she always solved the problems quickly. I really appreciated her way of dealing with things. I needed to learn this from her. (Critical incident, 27 December 2006)*

The student teachers were confused when they were instructed that the needs of pupils should be properly attended to, since they had been told at the university that the teacher's authority had to be paramount in their dealings with pupils. When asked to consider pupils' needs by their school mentors, Mr Wang, Ms Chen and Ms Huang expressed similar sentiments:

*I knew that teachers should have authority, and that therefore students should accept our words; however, it looked like we were forcing pupils to do*



*something they didn't like. I felt sorry for them. (Mr Wang's Journal, 12 January 2007)*

*I wondered how should I do this [build authority], and then I found it was not necessary. The pupils behaved well and they were lovely. Forcing them to do something which made them unhappy was the last thing I wanted to do. (Ms Chen's interview, 27 December 2006)*

*It is necessary to establish authority, because it is only this that makes pupils accept our words. However, authority should be used with caution. Sometimes you should respect the needs of the pupils. It is not easy to get the right balance. (Ms Huang's journal, 22 December 2006)*

Also, student teachers found their teaching ineffective, because they could still not grasp the essence of the teaching content when they were preparing to teach. Ms Chen said:

*I thought the range of content was huge. One unit could possibly have been divided into four or five sections. [At that moment] I didn't know which part of the content I should emphasise. If teaching was like this, my pupils would definitely not know how to learn. Then I started to worry about whether it was difficult for the pupils to learn, or if I could ever get my ideas across to them. (Interview, 27 December 2006)*

In the latter part of this stage, the student teachers gradually began to understand their pupils when applying teaching tactics. Ms Tu described the teaching tactics she had learnt from her mentor about how to teach. She said that she could understand pupils and ensure their learning with one particular tactic. During the interview she described the situation in which she had learnt this:

*...My mentor reminded me to pay attention to whether or not the pupils were concentrating on the learning. He told me that I would know by looking at their*

*eyes. For example, I could discern whether or not pupils have learnt how to write a Chinese character correctly in two steps. Firstly, I should see whether their eyes are focused on me when I am demonstrating the correct way to write Chinese characters. Then, I should write the same character again on the blackboard and pay attention to the pupils who aren't exactly following me...* (Critical incident, 13 October 2006)

Pupils influenced the teaching of student teachers. When student teachers found particular tactics gave the desired results they continued to apply them; otherwise, they looked for alternative solutions. Ms Hu commented on this:

*I think it was the attitude of the pupils. Their reaction told me whether they liked the style of teaching I was trying for the first time. Then I would feel happy and think this style was nice and the next time I would try it again. I was happy for a long time, as this teaching style was suitable for them, and it made me think that I could try it another time. If I didn't get the response I expected, I might think about whether my teaching style had problems, or whether I should change it next time.* (Interview, 27 December 2006)

Ms Wu mentioned that she could learn what and how pupils had learnt when reviewing their homework, which showed her how she should modify her teaching. She often put a lot of emphasis on how to teach properly by using several tactics when learning to teach:

*This usually happens when I am attempting to learn how to teach Chinese properly. I am afraid I might miss something I have to teach, so I make notes everywhere in my textbooks. The mistakes pupils made usually showed up in their homework. Thus I was able to prepare my teaching materials after class and make improvements in the teaching of my next session.* (Interview 7 January 2007)

Thus, it can be noticed that student teachers gradually engaged with the learning of pupils and attempted to take this into consideration when seeking to improve practice. Ms Li was reminded by senior colleagues and peers that she should pay attention to the dispositions of pupils and her teaching should be tailored to the needs of pupils when she considered the academic achievement of her pupils.

*I was informed by my mentor and some senior colleagues that my teaching was too much focused on teaching tactics and failed to see how pupils felt. I was shocked and started to consider it..... This was one month ago and I right way attempted to understand how my pupils feel and requested my mentor to give me more information and she was supportive..... (Interview 23 December 2006)*

The talks with parents also reminded student teachers that the pupils should be carefully cared for. Mr Wang mentioned his conversation with a mother of a pupil in his class. This helped him understand more about the pupil and thus he started also to be more alert to the learning of other pupils,

*..... The mother talked to me that her child had difficulties in completion of the homework of math yesterday and this was what I assigned to them. I wondered what happened to my teaching and started to consider the situation of that pupil and other pupils..... (Interview, 22 December 2006)*

Mr Li also referred to similar situation. He considered that he should understand more about the pupils in the class and requested his mentor an advice to deal with it. In his reflective journal, he stated,

*I know some parents are difficult to deal with and sometimes are quiet annoying when they came to me to talk for a long time or too frequently. However, that is a good way to understand a certain amount of pupils, by their disposition and background.....then asked mentors about how to deal with them adequately..... (Reflective journal, 21 December 2006)*

In addition, the mentor of Mr Zhang, who was considered to be a successful student teacher in the teaching practice period, indicated that Zhang had begun to consider the needs of pupils in the middle of the teaching practice period:

*He attempted to think about how to connect pupils' experience to his teaching, because this could help pupils to learn more easily. He said that this was the big challenge for him and it took time to prepare his teaching materials. (Mentor interview, 23 December 2006)*

In addition, Mr Li recounted his experience of how to tailor his teaching to the dispositions and everyday lives of pupils during a mathematics session:

*When I taught addition, I tried to connect mathematical questions to the classroom context or to everyday experience, so that pupils could quickly understand how to do it. For example, I told them they were now going to have lunch, so what kind of food were they going to buy? They told me the food they were familiar with and the price. Then I calculated the total price... (Critical incident, 27 December 2006)*

Ms Li's mentor confirmed her attempts to apply her understanding of pupils to her teaching:

*I considered that she gradually understood how to manage pupils through the teaching practice period. She used some teaching tactics and pupils reacted to her and then she gradually understood the disposition of the pupils. Now she uses her knowledge of this aspect in teaching. (Mentor interview, 27 December 2006)*

Although student teachers began to pay attention to the needs of pupils, they indicated that their understanding of pupils was not enough to help them perform satisfactorily as

teachers and apply classroom management. Ms Li knew the content of the subject, but was anxious when attempting to transform the subject content into a form which her pupils could easily understand. She mentioned that, when teaching Mandarin, she had difficulty in transforming her knowledge into a form that students could understand even though she understood the teaching content quite well. The pupils' response to her teaching was not as she expected:

*When I was instructing them I found they couldn't understand the words or sentences I tried to explain. I should have been able to explain it in a language they could understand, but sometimes I couldn't find the right kind of language. I found I was lacking experience and didn't know how to interpret the subject properly. They didn't understand what I had interpreted, and I found this situation made teaching a language more difficult. (Journal, 29 December 2006)*

It was challenging for student teachers to make their teaching effective at this stage. It can be assumed that this is because student teachers still have limited knowledge of their pupils, as indicated in the previous section. Although the student teachers had learnt a great deal of teaching knowledge in higher education institutions, teaching practice was nevertheless complex. It was not easy to learn teaching tactics efficiently and to be concerned over the needs of pupils at the same time. Even though they prepared everything in detail, things did not go as they expected. Student teachers might fail to take care of all the pupils in the classroom if they are concentrating on developing their teaching skills. Ms Chen stated that she overlooked the responses and needs of pupils, especially those who did not speak very often, and kept silent as she concentrated on her teaching performance:

*Sometimes you focus on the steps you are going to teach, so you might overlook something..... But I thought it was sometimes easy to overlook something,*

*especially when many pupils actively expressed their opinion. When you felt you were getting responses from your pupils, it was very possible that you overlooked those who kept quiet. (Interview, 27 December 2006)*

#### **9.3.4 Confidence in teaching**

In the latter part of the teaching practice period, student teachers became familiar with using teaching tactics and were more confident in teaching. Like Zhang and Lin, Mr Wang mentioned that his teaching tactics in teaching Mandarin had changed and improved. After several weeks of teaching practice, he grasped the skills needed to teach this subject:

*When [I was] at school and had Mandarin sessions, [my teachers] just taught new words and told me the outline of the articles [I had to read]. When I taught this subject, I found that when you taught new words you not only taught [your pupils] the meaning of the words and how to make sentences with those words, but how to use them in their everyday lives. You could employ many approaches, guiding them to read the articles, rather than just asking them to read in sound and directly giving them the outline ... Afterwards, I paid more attention to the sentences because I thought their concept of making sentences was not clear. I helped them to learn by making more sentences. (Journal, 10 January 2007)*

Similarly, Ms Chen said that she could use teaching skills effectively. She understood how to guide pupils to learn and gave them clear concepts, rather than simply inculcating them with her personal ideas about mathematics:

*In the past I felt that addition was very simple; nonetheless, when I knew how to guide pupils to learn step by step later, I found I taught this unit too quickly... Afterwards, I realised that it required skill to get these concepts across to your pupils. You had to teach the class slowly, so that you could guide them to understand; something like concept guiding, giving them a very clear concept, rather than doing something through narrative. (Interview, 7 January 2007)*

The student teachers said that their teaching performance had improved and indicated that, after several weeks, they commented to employ different styles of teaching. As Ms Wang remarked:

*At the beginning of my teaching, I spoke most of the time. Then I employed a different style, letting them do things by themselves, or answering questions. I thought a change should be made because, when the teaching content was different, you had to adjust your teaching style... [This] would give the pupils more chances to express themselves... but I thought that, in this respect, you were sometimes too rushed to tell them about many concepts, so they forgot them very quickly. I think this was because I simply used a narrative style of teaching. As far as I am concerned, I should learn more, like different skills [of teaching]... (Critical incident, 3 January 2007)*

### **9.3.5 Confidence in classroom management**

After learning how to manage a classroom through teaching tactics, these thirteen student teachers were able, over a period of time, to achieve sufficient authority and arrange classroom activities properly. During most of the teaching practice time, they attempted to balance maintaining teacher authority with learner-centred principles. At this stage, the student teachers began to establish their way of classroom management. Mr Li mentioned that his understanding of the pupils enabled him to arrange his classroom management properly:

*My mentor told me that I should understand the characteristics of the pupils, and then this thing [class management] would be easier. For example, some pupils are good at dealing with interpersonal relationships, some are naughty and show themselves to be bold, and some study hard. You could get to know their situation by casually talking with them after a session and asking some well-behaved or clever pupils to help deal with some simple work. You could treat some pupils like friends, and they helped you to take care of the whole class. But when they made a mistake, or did something wrong or acted*

*improperly, you would still have to give them a warning. (Interview, 23 December 2006)*

Ms Wang indicated that she used a similar way to deal with classroom management and found that it was useful. She described her way of managing the classroom:

*When a session was over some pupils would come to chat with me, probably because they considered me to be a friend. An idea occurred to me that I could understand the situation in the classroom from these pupils and might ask some of them to help me to deal with simple things. (Interview, 3 January 2007)*

Ms Chen said that the way to properly manage the classroom was to understand the characteristics of pupils and then apply this knowledge in the class:

*We need to develop skills for classroom management. The most important thing is to understand pupils and then realise what you need. Then you can deal with that easily... I think I will group my pupils by their characteristics. For example, I will put 'different kinds' of people in one group, so that those who are talented can help those who are left behind. (Interview, 27 December 2006)*

Her mentor was impressed by the way she dealt with contingencies and disputes between pupils. This proved that she had a certain understanding of what and how pupils thought:

*I'm sure that now she has good knowledge of the pupils in my class and has developed some tactics to deal with them... This morning I found her way to resolve a dispute between pupils was quite skilful. She made a good judgement and successfully persuaded pupils to accept her arbitration. This was the performance of a good teacher. (Mentor interview, 27 December 2006)*



Mr Li compared the situation now with the beginning of the practice period and indicated that he had made great progress in teaching. He can now properly control the whole classroom:

*It was not good in the beginning; nonetheless I tried to let them know what they should follow when I was on the platform. They didn't need to be so restricted but it didn't mean they could do whatever they wanted... I was more confident when I stood on the platform. The pupils were more disciplined. I was quite satisfied with the way they behaved and was sure that I had made great progress. (Interview, 23 December 2006)*

Li's mentor also mentioned that Li had made great improvement in maintaining classroom discipline:

*He was good and knew how to keep some naughty pupils in their seats. I don't know how he coped with those pupils but it seemed that he could manage the classroom properly. This helped him to make big improvements in teaching. I consider that he is competent to take charge of a class in the future. (Mentor interview, 23 December 2006)*

At the beginning of this stage, even with the help of mentors, the student teachers were struggling to discipline pupils in the classroom. They had learnt from their mentors the importance of teacher authority when teaching, but they felt confused because this seemed to contradict their learning at university. Then, they attempted to understand their pupils, and then properly apply the teaching skills and strategies they had learnt. Thus, in the end they became more confident in teaching. The extracts from the findings show that the student teachers still had only a limited understanding of their pupils when they first stepped into this stage, but that they felt more confident in the application of tactics in teaching and classroom management. Also, at this stage they

had begun to learn the dispositions of pupils and had achieved a certain understanding of the pupils in the class.

At this stage, it can be seen that mentors, the school leadership, senior colleagues and peers play important roles in enhancing the learning of effective teaching tactics. Mentors, senior colleagues and peers helped these student teachers to learn the skills of teaching and classroom management. Also at the later period of this stage, the communication with mentors and parents remind student teachers that the needs of pupils should be considered when teaching.

Furthermore, the pedagogical content knowledge of student teachers improved in this stage. At the beginning of the stage, with limited understanding of pupils and unfamiliar with teaching and classroom management, the learning to teach only focused on the tactics per se, with insufficient regard for pupil outcomes. At the later period of this stage, thirteen student teachers knew more about the disposition and background of pupils and how pupils were learning the materials they taught. This showed a significant improvement in the growth of pedagogical content knowledge. Those student teachers were in a position to step up to next stage.

Despite knowing that they should pay attention to and meet the needs of pupils, the student teachers usually gave teaching skills and classroom management the highest priority. This was a one-way feedback mechanism, focusing on teaching rather than learning. They also mentioned that they could understand the teaching content. However, when they began to teach they still found it difficult to transform the content into ways pupils could understand. It can be inferred that the student teachers could not clearly understand the backgrounds of their pupils, even with the help of their mentors,

because they were not with them long enough during the teaching practice period. They might improve their teaching skills by reflecting on their teaching performance and discussing it with their mentors. This kind of reflection is largely for operational, or for what can be called tactical, purposes. However, after a certain period of time with pupils, five of the eighteen student teachers found that they, like Lin and Zhang, felt more confident in teaching practice. They began to form their own teaching perspectives and to evaluate the teaching perspectives of other senior or experienced teachers, as well as to consider their university learning. This is demonstrated in the following section.

#### **9.4 The strategic stage**

After the idealism stage and the survival stage, some student teachers develop their own teaching styles and gradually grasp the strategies needed to deal with classroom management and to understand how to behave like a teacher. In the later stage of teaching practice, student teachers begin to understand the needs of pupils, mainly connected to 'their learning, their social and emotional needs, and about relating to pupils as individuals' (Fuller and Bown, 1975: 39). They develop their own way of teaching and classroom management, and start to reflect on their university studies. Out of the twenty case studies, seven student teachers began to teach strategically during the teaching practice period. The quotations chosen in this section are from five of these seven. The reflections of the other two, Lin and Zhang, were demonstrated in the previous two chapters. The evidence suggests that another five student teachers had realised that learning was a complex thing and, therefore, that teaching and learning were also complex. The teaching in this stage was mainly influenced by mentors, who encouraged student teachers to do reflective thinking. Those five student teachers also showed their growth in pedagogical content knowledge.

#### 9.4.1 Reflection on university learning

Student teachers reflected on their practice when they felt confident about teaching and classroom management. In the struggling stage, they focused on accommodating themselves to the life of teaching practice, and they became confident in teaching and classroom management after several weeks of teaching. At this time, student teachers began to reflect on their teaching practice. They reflected on their present practice, usually based on their university learning. Ms Wang mentioned that she began to reflect on her practice when she felt more confident in teaching and was encouraged by his mentor.

*Getting used to the life of a student teacher, I began to think how to make my teaching better and more attractive. Recently I happened to read the material I had studied in university, and I found some useful ideas for teaching, pedagogy and theories I hadn't noticed before. I might use them later on ..... My mentor encouraged to do this kind of reflection, by giving me more opportunities to practice that. She considered it helpful for my future teaching (Interview, 3 January 2007)*

Ms Chen considered that concern for pupils should be emphasised in teaching, and this is what she had learnt at university. The teaching practice had provided an opportunity for her to prove her university learning.

*The teaching practice just confirmed what I had learnt at university. Concern for learners played an important role in teaching. In terms of teaching, the ability and the needs of pupils should be taken into account when preparing teaching materials and applying teaching skills. With regard to classroom management, understanding pupils' characteristics helped me to apply teaching skills or group pupils in the class efficiently and properly. (Journal, 10 January 2007)*

Her mentor mentioned that she had asked her to remember the content of her university learning and had examined her teaching using these studies:

*I found that she was very confident in her teaching, so I asked her to review the studies she had learnt at university... She told me that what she had learnt at university had been proven in her teaching, and she could still see where she needed to improve. (Mentor interview, 27 December 2006)*

Mr Wang mentioned that he had benefited from several theories of university learning. Before stepping into the strategic stage, he had never considered the theories or the content he had learnt at university:

*The theories which I had regarded as inapplicable and the academic books which hadn't been touched or read for a long time were found to be useful after I read them again and used them to test my teaching practice; for example, the Pygmalion Effect and the behaviourist theory. These books or theories gave me the some ideas to reflect on, and helped me to improve my teaching practice. (Interview, 14 January 2007)*

Ms Li said that, at the beginning of her teaching practice, the theories had been neglected because they were not applicable, but they proved very useful after several weeks of teaching practice.

*Although the theory was not useful at the beginning, it proved itself as time passed. Having become familiar with the teaching life and then reading through the material, some stuff was quite reflective. It occurred to me that my teaching still needed to be improved. (Interview, 23 December 2006)*

Her mentor also indicated that Li had recently read some studies and that she discussed them frequently with him. He considered it beneficial for her to review some research and university studies:

*Yesterday we talked about some theories, and she mentioned that after teaching for a period of time she had started to sense that some theories could be used to explain the teaching situation she was encountering. This is good for her professional learning to be a teacher. (Mentor interview, 23 December 2006)*

#### **9.4.2 Forming personal teaching perspectives**

Ms Chen mentioned that she did not just follow the perspectives of her mentor and other senior colleagues, but could make a judgement about their suggestions and advice in teaching:

*A tactic isn't just a tactic in itself. Its application depends on the person who applies it and the pupils to which it is applied. There are no tactics which can be used universally... It is useful to learn tactics from other people and know how these tactics are applied. But tactics cannot produce exactly the same effect. Pupils are from different backgrounds. Also, I don't have as much experience and knowledge in teaching as other, more senior, colleagues. (Journal, 16 January 2007)*

Mr Wang began to form his own perspectives in developing his teaching expertise by reflecting on his university study and research and its application in teaching practice. When requested to analyse his learning experience, he described how he had learnt to teach:

*...when I am free at home and reading articles, I am thinking about whether or not I am teaching properly in the school. This kind of reflection helps me to improve my teaching. The practice helps me to modify my teaching and understand how pupils react to it. I think if I can keep doing this I can gradually*

*improve my teaching and become a competent teacher. (Interview, 14 January 2007)*

Mr Wang's mentor also mentioned that Mr Wang had his own idea of teaching. His attitude was quite different from three months previously, when he had just began teaching:

*...I found that he was developing his own teaching perspectives. He asked me to arrange more observation of the teaching in other classes and talked with other senior colleagues. Then he asked me whether this style of teaching or classroom management was suitable for my class. Sometimes he criticised the teaching he saw and gave his opinion... (Mentor interview, 14 January 2007)*

At this stage, the student teachers were confident in their teaching and classroom management. They behaved like teachers and gradually developed their professional identity in teaching. They gave strong performances in teaching and classroom management and they had also made significant progress in their teaching. Because they had learnt to understand pupils better, they could appropriately prepare their teaching and tailor it to the needs of pupils and present it to them. Furthermore, these student teachers were found to be able to maintain order in the classroom reasonably well, even though they contended that they were still attempting to strike a balance between maintaining teacher authority and implementing a learner-centred teaching principle. When the student teachers felt confident in teaching, reflection became an important characteristic of their practice and eventually included drawing on their university learning. The review of these cases showed that mentors played a crucial role in encouraging student teachers to do further reflection. Reflection during the previous two stages had been more operational and technical. However, at this stage, it can be said to be strategic, looking at practice from much broader and more general principles.

Furthermore, it can be perceived that the growth of pedagogical content knowledge of these student teachers occurred during the teaching practice period.

## **9.5 The growth of pedagogical content knowledge in teaching practice**

In this section, I will demonstrate the improvement of student teachers in their teaching, classroom management and the change in teaching perspectives.

### **9.5.1 Learning to teach**

It was found that some student teachers began to consider using what they had learnt at university in their teaching practice. The empirical findings show that, at the stage of seeking teaching materials, student teachers simply followed instructions, whether from teaching guidelines, the advice of mentors, or senior teachers. Having tried and tested these methods, the student teachers found which skills or ways were suitable for their teaching, and which were good for helping their pupils to achieve their expected performance. Having become confident in teaching, the same student teachers began to develop their teaching by reflecting on the theories or approaches they had learnt.

Quotations from previous sections can be juxtaposed here to highlight the progress student teachers made during the teaching practice period. For example, changes can be seen in two quotes from Mr Li. Originally, he explained that:

*I had thoroughly discussed my teaching schedule and the tactics I was going to use in the session with my mentor, and she gave me some suggestions about how to implement them. I followed all of them in my session and knew that it would be fine because I had done everything I could do... (Interview, 11 October 2006)*



Two months later, he stated that:

*When I taught addition, I tried to connect mathematical questions to the classroom context or to everyday experience, so that pupils could quickly understand how to do it. For example, I told them they were now going to have lunch, so what kind of food were they going to buy? They told me the food they were familiar with and the price. Then I calculated the total price... (Critical incident, 27 December 2006)*

### **9.5.2 Teaching approach**

When beginning to teach, the student teachers focused on how to present teaching materials to pupils properly. This was a rather tactical way of teaching. They may have resorted to teaching guidelines or the teaching strategies of mentors. However, some student teachers said that they could not properly deal with contingencies which disrupted their teaching, and this made them become more controlling in an attempt to make pupils disciplined. In the latter part of the teaching period, the student teachers tailored their teaching to the needs of the pupils. They tried to motivate pupils to learn through several teaching tactics. This is shown in the quotations from Ms Li. First, she stated that:

*...you ask me how I taught. I wrote the learning targets in the schedule and the way I taught was similar to my mentor's way. I copied her teaching style and pedagogy, like motivating the pupils to learn, pre-reading the essay, reviewing new words, making sentences, exploring the essay, and giving written homework and tests... My mentor tends to ask pupils to look up and practise new words which have been taught in the session. I followed her way to learn how to teach... (Interview, 8 October 2006)*

Two months later, she stated that:

*When I was instructing them I found they couldn't understand the words or sentences I tried to explain. I should have been able to explain it in a language they could understand, but sometimes I couldn't find the right kind of language. I found I was lacking experience and didn't know how to interpret the subject properly. They didn't understand what I had interpreted, and I found this situation made teaching a language more difficult. (Journal, 29 December 2006)*

### **9.5.3 Learning and learners**

Changes in teaching beliefs were also shown in relation to learning and learners. In the first three stages, the teachers learnt how to apply tactics and skills in teaching properly. They considered that pupils were knowledge receivers and their teaching focused on the application of teaching tactics and whether these tactics could produce the expected reaction from pupils. In the latter part of the teaching practice period, it was found that student teachers began to consider interacting with pupils because they realised that understanding how pupils think and what they need is crucial in teaching. This can be demonstrated by Mr Lin. First, he said that:

*I finished the sections entitled 'motivate pupils' learning' and 'read article' in ten minutes... and followed this with a motivation section, in which I asked pupils to read an article five times. I had to maintain discipline in the classroom, and this took me 30 minutes in total. Then I asked pupils to practise the new words in the article in the last ten minutes. If I had not taken time to manage the classroom, it would have been a mess... In the next session, I asked pupils to make sentences using the specific patterns shown in the article, and this took a total of two sessions... (Interview, 17 October 2006)*

Two months later, he stated that:

*When I taught addition, I tried to connect mathematical questions to the classroom context or to everyday experience, so that pupils could quickly understand how to do it. For example, I told them they were now going to have*

*lunch, so what kind of food were they going to buy? They told me the food they were familiar with and the price. Then I calculated the total price... (Critical incident, 27 December 2006)*

#### **9.5.4 Sense of self as a teacher**

At the beginning of teaching, the student teachers wanted to make friends with the pupils. However, when they found that this relationship hindered their teaching performance, they become authoritative. After a period of teaching time, when they had become more confident in their performance, the student teachers then considered the needs of the pupils and guided their learning. With a view to improving their teaching expertise, they reviewed related theories about teaching and reflected on their performance. This change in their sense of self as teachers can be demonstrated in the following quotations from Ms Wang. First:

*I remember he was friendly and responsible. What impressed me most was that he was a good listener and liked to understand what students thought. He helped us to solve problems when we came to him and I found he always gave us good suggestions. I try my best to be this kind of teacher and hope my student teachers will be like this. (Interview, 13 October 2006)*

Three months later, she stated that:

*When a session was over some pupils would come to chat with me, probably because they considered me to be a friend. An idea occurred to me that I could understand the situation in the classroom from these pupils and might ask some of them to help me to deal with simple things. (Interview, 3 January 2007)*

#### **9.6 Conclusion**

In this chapter I have explored the professional learning and changes in the teaching approaches of twenty student teachers, along with the factors that affected their teaching and learning. Their progress in learning to teach matches the model developed in Chapter 3: idealist, survival, tactical, and strategic. In this chapter, we can see also the growth of pedagogical content knowledge of these student teachers. This improvement was made with the support of mentors, senior colleagues, peers, the interactions between pupils and sometimes parents, who provide student teachers with different perspectives and thus help them reflect on their teaching practice. Thus, at the strategic stage, it can be seen that seven student teachers demonstrate significant improvement in their teaching expertise, as their teaching is being tailored to their understanding of pupils, and, after encountering and adapting several perspectives from people in school, they develop their teaching perspectives and reflective ability.

In support of the purpose of this chapter, namely to amplify or challenge the findings from the two individual case studies, it is clear across all twenty of these student teachers that there are key factors that enhance their professional learning and how this happens. It is clear also that the absence of or weakness in an effective combination of personal disposition, a well-matched mentor and supportive leadership, leads to some student teachers at best not developing and at worst floundering. They do not get beyond the tactical stage, focusing on skills and short-term tactical decisions or they remain at the survival stage, still as unsure about how to teach as when they began their teaching practice. In the final chapter that follows I will draw conclusions from my study and make recommendations based on my findings on developing the teaching practice period.

## Chapter 10

### Conclusions and Recommendations

This chapter concludes the thesis with reflections on the findings derived from the discussion of the factors that affect the learning experience of student teachers (Chapter 5), the two in-depth case studies (Chapters 6 and 7), and on the professional stages discussed in the overview of the further eighteen cases (Chapter 8 and 9). This is followed with a proposal for how these findings can offer a distinctive contribution to understanding how the experience of the primary phase of student teachers in Taiwan may be enhanced.

#### **10.1 Conclusion**

##### **10.1.1 The teaching practice period in Taiwan**

The arrangement of the teaching practice period has recently been seen to be an important issue in the teacher-training programme in Taiwan. This is because the support for student teachers when they are learning to teach was found to be insufficient. The programme does not effectively help student teachers to socialise within the school environment or develop their reflective practice. Thus is especially the case in terms of their attitudes toward new concepts, such as the impact of university learning and the teaching perspectives of others.

It is now being questioned whether the scheme for the teaching practice period, introduced in 1997, can improve the learning to teach of student teachers. In the new version of the teaching practice period, student teachers teach with their mentors as

probationary teachers, rather than on their own, and the duration of the scheme has been reduced to six months.

### **10.1.2 The relationship between the literature and the proposed model**

This thesis argues that an investigation into the learning to teach of student teachers in the teaching practice period needs to consider three aspects: socialisation, reflection, and professional development.

In terms of socialisation, the work of Durkheim (1960), Mead (1934), Bourdieu (1993), Lacey (1977), and of Zeichner and Tabachnick (1983) was reviewed. They considered that, in the process of socialisation, people always learn the values or codes of their society, and thus keep society stable. However, these studies failed to appreciate that, in this process, people do not simply follow social values; they also form and re-form their perspectives based on their understanding of those values. This was demonstrated in the findings of the current study in relation to the early stage of the learning to teach of all twenty student teachers. When first beginning to teach, they internalised and adapted to school life. For example, in Lin's data, she indicated that she believed that she should follow the instructions in teaching manuals and behave like other experienced teachers:

*My teaching mainly followed the instructions in the teaching manuals... The books provided me with information about the important things to take care of and reminded me not to omit anything I should be teaching. In addition, I could know how much time to spend on each point and what kind of preparations I should make in advance. (Lin's interview, 23 October 2006)*

However, by the end of teaching practice period, they had begun to create their own teaching perspectives, based on their personal understanding of what it means to

behave like a teacher. Thus, their teaching beliefs changed and they did not simply follow what other teachers had said and done. This was also shown in the data concerning Lin's experience in the latter part of her teaching practice period:

*When I was teaching, I knew that if I spoke too long on the earlier material, I would be forced to spend less time on the material in the later session... But now I focused more on the things I considered to be important. It didn't matter if I included unimportant things. That was fine if I could do it and my pupils could learn more. (Lin's interview, 14 January 2007)*

Literature concerning reflection, such as works by Dewey (1933) and Schön (1983) and studies related to reflective teaching, place much emphasis on the function of reflection when learning to teach, especially for inexperienced student teachers. Nonetheless, they do not see that reflection is based on values learnt from socialising. When entering a new social context, individuals have to do more at first to learn social values and codes. This was shown in the present study's findings, when discussing how student teachers attempted to improve their teaching by imitating or copying the tactics of other teachers, rather than by reflecting on their own university studies and forming their own teaching perspectives. For example, in Zhang's earlier teaching period, she wanted to follow the suggestions of her mentor when teaching:

*It was difficult to prepare the teaching schedule for the three sessions in this week. I considered that I couldn't teach properly if I didn't know in advance the details of how to teach; for example, at what point should I do group discussions or design teaching activities to motivate pupils' learning? It is quite difficult... My mentor suggested to me that I should take note of what was stated in teaching manuals, but that it was not necessary to follow them exactly. I now also don't worry about whether I can follow the schedule exactly. If I can't, I can do it in the next session. (Zhang's interview, 8 October 2006)*

In terms of professional perspectives, three studies were reviewed: those of Fuller and Bown (1975), of Lacey (1977), and of Furlong and Maynard (1995). Although these studies demonstrated how teachers learn to teach, they failed to explore the strategic stage, in which student teachers develop their own teaching judgement and reflect on their university studies. The findings of the present study contradicted the models of these studies and showed that student teachers arrive at the strategic stage when they become confident in applying the teaching tactics they have learnt to teaching situations. This means taking risks and trusting their own professional judgement.

The model of the professional learning of student teachers presented in the present study is unique because it combines the process of socialisation with reflection and professional development, as confirmed by my empirical findings. This model adequately explains how student teachers learn and develop their own teaching perspectives in teaching practice, and illustrates the factors which affect the learning to teach of student teachers. The empirical findings of this study have provided sufficient evidence to support this model, in which learning is the main activity at the point when student teachers have no classroom experience, or very little. Thus, this can be seen as a process of socialisation. At this point in time, student teachers tend to copy or imitate and internalise the norms and principles of schools through their interactions with other individuals and groups in the school environment. They learn to behave and think along the ways that they recognise teachers as doing. They may reflect, but this may be restricted to reflecting on personal experience or checking whether or not their behaviour or teaching ideas match what they regard the ideas of a teacher to be. It can be said that they reflect tactically, making day-to-day decisions. However, in the latter part of the teaching practice period reflection becomes the main activity of student teachers who have successfully learnt to teach. They gain confidence in their teaching



performance and develop their own beliefs about teaching. They begin to review the most up-to-date literature and the university learning they had formerly shelved, or take note of other experienced teachers, and then make their own judgements. At this stage of teaching, student teachers are teaching, rather than learning.

### **10.1.3 Research findings**

This study has addressed three research questions, which are answered in the sections below:

1. What factors enhance or hinder the professional learning of Taiwanese student teachers during the teaching practice?
2. How do these factors influence their development as beginning teachers and their broader learning experience?

#### **10.1.3.1 Factors that influence the learning of student teachers**

The following six main factors have been found to impact the learning to teach of student teachers, and these are put in the order of significance:

1. instructing and teaching styles of mentors;
2. personality of student teachers;
3. attitude of leadership and senior colleagues toward the teaching practice period;
4. dispositions of pupils;
5. educational beliefs of parents;
6. teaching beliefs among peers.

It can be concluded from the findings of this study that the first three factors play an important role in the learning to teach of student teachers and, to a great extent, decide whether or not they will achieve a successful performance in the teaching practice period. The most important factor is considered to be mentoring, since mentors with good mentoring skills can support the learning-to-teach process of student teachers. Ms Chen and Ms Wang achieved a satisfactory teaching performance because they had supportive mentors, as illustrated below:

*Basically she respected my decision, but sometimes she gave me suggestions; for example, giving more chances for pupils to discuss what I had just taught. She found that I spent most of my time lecturing in class and didn't give pupils time to exchange opinions with each other and digest the whole content. My mentor meant for me to learn by trial and error. (Ms Chen's interview, 27 December 2006)*

*When I was teaching, our mentor usually sat at the back of the classroom. She rarely intervened in my teaching. My mentor usually let me decide how to teach and didn't say too much about what I should do or how. But when I had a problem she would give me suggestions. (Ms Wang's interview, 3 January 2007)*

The quality of mentoring is certainly a significant factor in the learning to teach of student teachers. However, it may not be the only decisive factor in producing a satisfactory outcome for student teachers. The personality of the student teacher also plays a crucial role. A supportive mentor may not produce successful results when he or she has to work with a student teacher who lacks a suitable personality for teaching. Ms Fu had a supportive mentor who worked hard with her. However, Fu was shy and lacked diplomatic skills when dealing with pupils. This caused her to fail in her learning-to-teach practice period. Fu acknowledged this in her reflective journal:

*I have to say that I worked very hard in teaching but felt sorry that I still felt I was struggling to teach at the end of the teaching practice period, even though my mentor helped me a lot. Peng tried to tell me how to get along with pupils and showed me some tactics for how to do that. Also, she demonstrated how to teach well and had discussions with me frequently. However, I found it difficult... (Ms Fu's Journal, 10 January 2007)*

Even though Fu had a supportive mentor, she still struggled with her teaching and she noted that her personality had led to her failing in the teaching practice period. Thus, personality is an important factor in the learning-to-teach of student teachers.

School leadership is placed as the third crucial factor because school leaders who pay attention to teaching practice create a supportive atmosphere in which student teachers can learn and teach. However, this does not mean that every student teacher in the school can achieve a satisfactory result during the teaching practice period. Ms Tu and Mr Yang, who are considered to have stopped progressing at the tactical stage, learnt and taught in a school that had a supportive leadership and atmosphere:

*The class teacher next to my classroom helps me a lot. We are good friends and she is a good friend of my mentor. I know her from my mentor. She is in her fifth year of teaching... I remembered that, at the beginning of teaching, my mentor asked me to observe her teaching... Afterwards, she discussed with me the teaching and talked to me her ideas in his teaching. I benefitted a lot from the observation and discussion with her. (Ms Tu's Interview, 3 January 2007)*

*What makes me impressed is that it (teaching practice period) helps me a lot in my teaching. Student teachers are granted two or three hours once a week to have a workshop in the school, sharing their teaching experience. Class teachers, if they are free, usually come to the workshop and give suggestions. What makes me more surprised is that the head-teacher has decreased the sessions we have to teach in a week, to give us time to study for examinations in March. She even invites those who successfully obtain teaching posts in this or*

*other schools to share their experience. (Mr Yang's Critical incident, 10 January 2007)*

However, bad leadership can indeed hinder the learning process of student teachers. It was found that student teachers in this sort of school stayed in either the struggling or tactical stages:

*I found that my school didn't give enough time for student teachers. It assigned student teachers too much work so that they can't focus on teaching. The school should help student teachers more in their teaching. (Ms Yeh's Interview, 22 December 2006)*

*I think I need more time to concentrate on my teaching. My class teacher helps me a lot, but the assignments from the school management office are so demanding. I found myself like a worker in a factory, or sometimes like a clerk in the school office, especially during afternoons. But I am a student teacher (Ms Hu's Interview, 27 December 2006)*

These factors are associated with the model identified in Chapter 3. The instruction and supervision of mentors, who teach with student teachers frequently in schools and have more opportunities to exchange teaching ideas, have a huge impact on the growth of the pedagogical content knowledge of student teachers. In addition, characteristics which a student teacher needs determine to a great extent whether or not he or she can be socialised successfully into a school environment and engage in reflective practice in teaching. While Sinatra and Kardash (2004) considered only open-minded and resistant personalities, the current study notes the importance of empathy, diplomacy, flexibility, and the ability to take responsibility. Also, whether or not the school leadership pays attention to the teaching practice period impacts the learning-to-teach experience of student teachers, and is a more significant factor than the influence of pupils, parents,

and peers, even though student teachers are more likely to come into contact with these three groups during the teaching practice period. It is the adaptive combination of these three factors – mentor support, student teacher personality and school leadership - that enables student teachers to reach the strategic stage, and behave like the teacher they know they can be.

#### **10.1.3.2 Stages of professional learning**

Having examined twenty student teachers' experience of learning to teach, it was shown that seven were found to have achieved the strategic stage. This can be defined as being successful in the teaching practice period, behaving like a teacher. These seven student teachers went through four stages: the idealist stage, the survival stage, the tactical stage, and the strategic stage. In the first three stages, student teachers learn how to teach, imitate, or copy the teaching experience of their mentors, peers, or senior colleagues, attempting to behave in the way they recognise a teacher to behave. They also resort to teaching manuals or other useful books and aim to become familiar with the successful application of these teaching tactics. During this period of time, in the final stage, they form their own teaching beliefs and are able to judge whether or not their teaching materials and tactics match the learning needs of their pupils (Hobson et al., 2008). This section answers the second research question as to how student teachers learn to teach during the teaching practice period, influenced by the factors identified in addressing the first research question.

#### **10.1.3.2 Application of socialisation and reflection in the learning-to-teach experience of student teachers**

I argue that the process of learning to teach should be understood as occurring through socialisation and reflection. Socialisation here is the instillation of the perspectives of a school's culture, or learning how to behave appropriately within the prevailing social code. However, this idea overemphasises generality and neglects individuality and agency. People usually have to find ways to balance their individuality and generality (in other words, their social code) when attempting to acclimatise themselves in society. In this process, student teachers either learn and internalise the social code, or slightly adjust it to accommodate their individuality. However, when people become more confident in their social lives and need to exert less effort in learning the social code, they can spend more time in reflecting and combining the code with their own values.

This process is also shown in learning-to-teach in the teaching practice period, when student teachers begin their teaching career. Socialisation has a stronger effect during the earlier stages of the teaching practice period. In these stages, student teachers want to behave like other teachers or the teachers portrayed in teaching manuals. They attempt to internalise the beliefs and perspectives that they recognise as belonging to teachers into their minds with little modification. However, when they become confident in the application of teaching tactics and skills in teaching, they develop their personal teaching judgement, based on a review of their university learning and the suggestions of others, and even drawing on the teaching manuals. They attempt to behave like the teacher they want to be and examine their teaching performance, based on personal values and the feedback they receive from mentors, senior colleagues, peers and pupils. This happens in the latter part of the teaching practice period, which is referred to as the 'strategic stage' in the model presented in this study. The theories of socialisation and reflection helped to build the model of learning to teach, and they also

partly answer research question two, about how student teachers learn to teach during the teaching practice period.

#### **10.1.3.3 The growth of pedagogical content knowledge**

My empirical study also shows the growth of pedagogical content knowledge. When referring to pedagogical content knowledge, Shulman (1986) indicates that this sort of knowledge shows teachers' teaching expertise in making their teaching reach out to their students and understanding the dispositions of their students. This has been reviewed in section 3.1. In addition, Timperley (2008) also mentions that teachers in the process of professional learning have to encounter and reflect on different teaching perspectives, which to some extent challenge original teaching assumptions. This can result in an improvement of pedagogical content knowledge. In this study, the growth of pedagogical content knowledge of student teachers was illustrated in the case study chapters.

To recap, in the idealist stage, student teachers hold their original teaching perspectives. In the survival stage, student teachers encounter pupils for real, sense the difficulties in teaching and start to adjust their teaching perspectives. However, this adjustment is restricted tactically. This situation is still the same when in the next stage, the tactical stage, student teachers develop their teaching tactics by receiving suggestions from mentors, senior colleagues, peers, parents, and the school leadership. Student teachers at this stage may find the ways to make their knowledge reach out to pupils. However, this is not based on their understanding on pupils, but with a familiarity of effective teaching tactics. Their pedagogical content knowledge can be considered to be improving tactically. When teaching and managing the classroom confidently, student

teachers begin to consider the needs of pupils and reflect on different perspectives about teaching, including adding the theories they learned at university to what they have gleaned from others, most significantly their mentors, and to ongoing increasingly sophisticated reflections on their teaching experience. I regard that student teachers reach the strategic stage at this point, when they can make their teaching tailored to the learning needs of their pupils. Student teachers can teach confidently and reflectively and add their understanding of pupils to their pedagogical content knowledge in this stage.

## **10.2 Recommendations**

The findings of the current study suggest five recommendations as to how primary teaching student practice could be improved. They are:

1. Education for mentors about how to mentor student teachers;
2. Implementation of a personality test for student teachers;
3. Implementation of a full induction year for student teachers;
4. Further investigation of the model of learning-to-teach of student teachers;
5. Further investigation of factors of the learning-to-teach experience of student teachers.

Given the small scale of the sample, these suggestions have to be treated cautiously with regard to generalisability. However, they do represent the first attempt in Taiwan to draw on rich primary data about how primary phase student teachers learning experiences might illuminate the wider context of teaching practice.

First, this research has shown that not all student teachers receive the support they deserve during the teaching practice period. Student teachers may need more time to



learn how to teach, so that they can achieve the strategic stage as quickly as possible and so benefit pupils. Perhaps the arrangement of the teaching practice period needs to be improved. Most importantly, when exploring the factors which influence the learning of student teachers, it was found that the support and guidance of mentors play an extremely important role in their learning to teach and, unsurprisingly, those who receive ineffective support usually fail to achieve a satisfactory learning experience. It can be noted that mentors with abundant teaching experience and enthusiasm are helpful in the process of learning-to-teach of student teachers. However, they also 'have the potential to do harm' to the teaching of student teachers (Hobson et al., 2009: 214). School mentors provide different kinds of support because of their own diverse teaching experiences and perspectives on how best to learn to teach. Thus, it is recommended that mentors in Taiwan should be educated about how to support the learning-to-teach of student teachers in a way that takes account of their different backgrounds or characteristics. For example, introverted student teachers like Zhang need pro-active mentors who will keep reminding them what to do or provide suitable suggestions, while student teachers with a determined and strong personality, like Lin, may need mentors who can give them more space to achieve their potential. With a view to ensuring 'mentors have the capacity to support trainees' development of the requisite skills for making informed and professionally responsible, autonomous decisions' (Hobson et al, 2009: 424), mentors should receive education in universities, with regard to appropriate support for student teachers in the teaching practice period. This will require adequate co-operation between universities and schools.

Second, the personalities of student teachers should be identified, either by a personality test, interview, teaching demonstration, or in other ways, so that student teachers with the best potential for good teaching can be recruited, and mentors can

know how to provide the best support for them. From the case studies in the current study, personality was found to be a highly important factor which affects the teaching performance of student teachers. As noted above, student teachers who achieved a satisfactory outcome from learning to teach were found to be empathetic, diplomatic, flexible and responsible. With a view to recruiting teachers with suitable personalities, prospective teachers could be tested and interviewed by educational professionals. Interviewing prospective student teachers or implementing a test to choose and develop better-quality teachers would both benefit pupils and be more budget efficient. In England, the Training and Development Agency for Schools (TDA), which is responsible for teacher training, piloted a similar test, aiming to identify 'resilience, communication skills and empathy with young people' in 2009 and the arrangement has been suggested to be put into practice by the coalition government in 2011. Also, school mentors would have a better idea of the best type of support for student teachers during the teaching practice period. In the past ten years, universities teaching education in Taiwan have produced too many qualified teachers who have been unable to find teaching posts. This is indeed a waste of the money which student teachers and the government spend on teaching training. Using personality tests in student teacher recruitment may produce better teachers and save a good deal of government money, especially important now that the budget is so tight.

Third, thirteen student teachers were found to be confident in teaching, but only seven of them could be identified as having developed reflective skills. This shows that when the teaching practice context is suitable and mentors give them the support needed, student teachers with suitable personalities can become reflective teachers (Hobson et al., 2009). However, the fact that the context of the teaching practice period often does not match the real teaching context is an issue raised in several studies. In the teaching

practice period, student teachers teach with their mentors and take charge of only some sessions or subjects. Yet, teachers in primary schools are usually class teachers, responsible for most sessions of their class alone, and they have more frequent contact with parents. Thus, the scheme should either be revised to help student teachers to become more familiar with the real teaching environment, or another scheme is needed to support beginning teachers. Some studies in Taiwan, for example, Zhang (2003) and Lin and Zhang (2003), maintain that a further induction year is needed for beginning teachers, or that the teaching practice period should be improved or extended to a year, as it was prior to 1997. After all, it is essential for student teachers to be equipped with sufficient teaching expertise before they become teachers in primary schools. A similar approach is used in England and a study conducted by Totterdell et al.(2002) has demonstrated that this sort of arrangement indeed enhances the professional development of beginning teachers..

Fourth, having reviewed the reflective practice suggested by Pollard (2002), it was recommended that his two-dimensional reflective circle be adapted into a three-dimensional spiral model, so that it can be demonstrated how reflective teaching should be done and how teaching expertise grows. Pollard defines reflective teaching as follows: when teaching, teachers have targets they intend to achieve and the necessary strategies to attain them. Then, they reflect upon the results of their teaching and compare them with their targets, and use this information to modify their way of teaching. However, it is considered that reflective teaching could enhance the development of teaching expertise at different stages of learning. This reflection is qualitatively different in terms of the attitude student teachers adopt and the objects they reflect upon in terms of pupils' needs and teaching skills. Thus, when reflecting on their teaching, their teaching expertise grows simultaneously. Therefore, the cycle

Pollard mentioned should consider another dimension: the growth of teaching expertise, which adds richness and depth to reflective teaching. The present study has argued that reflection has the potential to pass through four stages, and that teaching beliefs will be different in the final stage of teaching practice. However, since this study has investigated the learning experience of student teachers, rather than their reflective practice during the teaching practice period, there is as yet insufficient evidence to confirm this hypothesis. It may be that other researchers interested in this topic would like to explore this question further.

Fifth, the factors which affect the learning-to-teach of student teachers should be explored further. For example, a student teacher may have a mentor whose gender is different from their own, or there may be a large age gap, which may affect student teachers' interaction, socialisation and reflective practice in the teaching practice period.

Sixthly, the potential integration of 'teaching practice into the initial teacher training programme, as in the current English model of teacher training, should be considered. The integration could offer opportunities for student teachers to examine and apply theories in their teaching practice, the schools and university tutors, thereby blending practice and theory more effectively.

### **10.3 Conclusion**

In this study I have explored twenty primary phase student teachers' experience of learning-to-teach in the teaching practice period. The findings suggest that teaching practice should take an adaptive approach, which foregrounds more the interplay

between the disposition of student teachers, mentorship, and school leadership. This would provide student teachers with better opportunities to reach the strategic stage, at which point they would behave like the teachers they know they can become. They would start to reflect on their university learning and develop their own personal teaching expertise. Some student teachers, like those in my study, probably do already. My findings suggest that more could reach the strategic stage earlier, if greater care was taken to fit mentor to student teacher in a school environment that is overtly supportive of and engaged in developing student teachers' practice. This leads me to think about my own teaching experience in my probationary year. I was an introverted probationary teacher with very limited support, who felt I had not become the teacher I knew I could become, despite passing the public evaluation. Had I been teaching with a mentor who knew how to support me, and had I been more supported by the school leadership, I might have learnt more and reached the strategic stage at the end of my probationary year. I might then have considered continuing with my teaching career.

Since very few studies exist that investigate the learning-to-teach experience of student teachers in primary schools during the teaching practice period in Taiwan, this present study offers a distinctive contribution to the field. It is hoped that further studies will contribute more data and analysis to this area and so provide policy-makers with more information to help them to improve the current not wholly satisfactory teaching practice period in Taiwan.

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## **Appendix 1: Letter of authorization of interviewee**

### **Letter of authorization of interviewee**

Dear (the name of a student teacher or a school mentor)

I would appreciate it very much if you would agree to be interviewed by me. . The purpose of my interview is to collect data for my PhD thesis research, which is entitled 'An Investigation of the Impact of 2003 Taiwanese New System of Teacher Induction'. This research will examine the implementation of 2003 Taiwanese new system of teacher induction and explore a better framework for this process in the future.

The research follows British Educational Research Association Ethical Guidelines (1992). This means that the name and organization you provide will be kept confidential and will not appear in my thesis and other related documentation. .

The interview will be held between DATE and DATE and it will last thirty minutes. All our conversation in the interview will be audio-recorded, transcribed and further analyzed in my thesis. You have the right to ask the transcription of your interview.

If you have any question about my research, please do not hesitate to contact me through e-mail or telephone. If you accept my interview, please reply to me by e-mail. I will connect you and decide the time and place of interviewing. My telephone number is (my landline number and mobile number in Taiwan). My e-mail address is (my email address).

With best wishes,

**TEXT  
CUT OFF IN THE  
ORIGINAL**



## Appendix 2: Example of transcription and coding.

## Teaching belief

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How do you feel about the teaching practice period of these months?

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ntor

*In these months..... I feel I learned a lot, perceiving that I am more confident in teaching, and not nervous frequently like before. I know how to deal with these children and try my best to get my ideas reached. I hope their learning will be delayed by my teaching which may be not good enough. I think I have good relationship with my mentor. We usually have nice chat and she gives me lots of assistance in teaching, like some teaching skills and how to prepare teaching materials. All in all, I learn very much and be more like a teacher.*

confident  
in teaching

What did you mean for teaching skills, for example, in which aspects?

hing manual  
il

il

il

*For example, you can't just teach what is said in teaching manuals. It is necessary to understand the dispositions of your children and apply knowledge in your teaching. Teaching different subjects need different teaching skills. For example, if you teach Chinese, you not only make your teaching interesting, but you have to ask your children to practice more. When we say practice, we naturally consider it as tedious and boring. But we can't deny it is a better way to learn this subject. If you don't let them do that, children easily forget everything. When you ask them what they have learned, they forget very quickly. Then your interesting and well-designed teaching become in vain. It is the same when you teach maths. Practice after classes is very important and crucial.*

not follow  
teaching  
manuals

It sounds interesting. I can't agree more with your viewpoints. If we teach like what you said, you both can make your teaching interesting to your children and help them to learn more. What do you think about your improvement in teaching during these months? For example, in terms of classroom management?

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ntor  
pil

tor

tor

*Classroom management..... I will try my best to understand the dispositions, like what I said before. I remember that, at the beginning of this semester, my mentor asked me to review teacher-parents books, and told me the children who I have to pay more attention to. It occurs to me that one child was very introvert at that time. His academic performance was not good and his family condition was not well. He was usually bullied by other classroom. I was reminded that I should be alert at this boy and prevent him from going astray. In addition, there was a rebellious one. My mentor told me that he wanted to draw your attention. At the beginning of the semester, I didn't take my mentor's advice. But, afterwards, I found my mentor was serious. It was her teaching experience that caused her usually to make better judgements in teaching.*

understand  
pupil  
disposition

How did you think about dealing with these children? Did your mentor give you any advice?

entor  
upil

upil

*Yes, my mentor told me that it was these kinds of children that you needed to care more and particularly tolerate their special behaviour. Also, you had to guide them. I think that she was right. For example, when they attempted to draw your attention by behaving differently, you had to know their purpose and neglect them, reducing their motivation to behave like this. At the same time, you needed to be cautious about how*

care pupil's  
need



upil *they* got along with other children in the classroom. In terms of the introvert children, you had to look for some extrovert children to help them involve in group activities of other children. These are the ways I work hard at this moment.

**Apart from these things mentioned, do you have anything which especially makes you impressed in these months?**

upil  
upil  
upil  
Just like what I mentioned, I thought that good teachers had to be very sensitive and sympathetic and understand their *pupils* characteristics. Take today's situation for instance, I really cared about *the pupils* and let them get as emotional as they wanted to. I also didn't pay much attention to this in the afternoon. You have to handle the events in a way where you not only see what is happening, but who made it happen, and you have to know when it happened. This approach enables you make a correct judgement and keep the situation under control. This made me expressed because I taught in a low-grader class, and at this age, *pupils* were fond of stating their opinion, whether of huge or tiny things. When they told you, you had to handle them. Sometimes the issues they told you about were extremely trivial and they asked you to make a judgement. I found it difficult to create my own standard to handle such situations, so I asked my mentor. I was surprised that she always solved the problems quickly. I really appreciated her way of dealing with things. I needed to learn this from her. understand pupils' disposition  
developing personal teaching judgement

**So you consider that your mentor is very supportive and it is necessary for you to learn from how she quickly and correctly handles the contingencies in classrooms.**

upil  
arent  
I agree with you. The thing like this is very important. In the primary school in Taiwan nowadays, class teachers have to closely look after every *child*, like performing your pastoral duty in the classroom. Not just this. You also have to see whether your children study well; otherwise their *picky parents* will come to classroom and argue with you. Sometimes they want to know how to help their children behave and learn better. You have to cope with lots of things simultaneously. If you are a teacher and don't have this kind of ability, you will feel stressful and then frustrated. I think my mentor's expertise comes from the accumulation of teaching experience in many years. I really have to observe her teaching and try to learn more in this period from the teaching with her.

**Hm..... you are right certainly. From your points of view, apart from the duty you have mentioned, do you think any responsibility teachers should take?**

*In addition to doing my best in teaching, I have to take care of every pupil and become the bridge between parents and schools.*

**So what will you do for this?**

pupil  
I think that the most important thing is to understand every *child*. Hence I can understand how to teach them. In the past, only one idea which I bore in my mind is how to treat my pupils well. However, afterwards, I consider that you not only treat your pupils well but you have to know how to guide them and facilitate their learning and make them behave well. My responsibility is not only to teach a pupils but a the changes of teaching beliefs  
care the need of pupils



pupil

*whole class. Thus, I need to have authority over my pupils. If I can't maintain the class in order, how can the pupils in my class learn?*

personal  
teaching  
beliefs

**So you think that pupils should be seriously controlled?**

*Not really. I hope that pupils can learn in the environment which they feel relaxed, but they have to keep disciplined. If not, their learning becomes difficult. I think that the discipline is very important. I learn a lot from my mentor. For example, climbing ladders, which I regard useful in terms of controlling pupils. But you have to stick to the regulations you set and announce to your pupils. When the performance of your pupils is satisfied, you have to give them points; otherwise, cut their points. You have to be fair.*

personal  
teaching  
beliefs

**It is not easy to get everything fair. Do you feel any change in your teaching between the beginning of teaching and nowadays?**

*Yes, I do. I make much progress in teaching. I am more confident in every aspect of teaching. I was nervous when I firstly stepped on the platform, worrying that I may miss something I had to teach, or be cautious about something contingent might happen when I was teaching. It was like fighting and I was always anxious. But now I know that I am fully prepared for my teaching and don't feel anxious. In addition, I gained much experience to deal with the possible situations in the classroom. That is, I know how to handle the pupils in my classroom and know how to teach properly, letting my pupils learn efficiently.*

the changes  
of teaching  
beliefs

confident  
in teaching

pupil

**What did you mean that you can keep your classroom in control?**

*I meant that I could understand pupils and their ideas and behaviour, guiding them through correct directions. In the other words, I find that I can adequately perceive how my pupils think and get them learn in efficient and behave properly.*

care the  
need of  
pupils

pupil

**So, could you try to analyze the change you have made from the beginning of teaching practice period?**

*At the beginning, I wanted to flatter with my pupils and, at the same time, I wanted to teach them well and behave as I expected. Afterwards, I found it was unrealistic and my teaching became worse, putting me in great pressure and a big trouble. Now I consider that it is responsibility for teachers to help every pupil learn well. Any skill or perspective I get, no matter from mentors, other teachers and my classmates, is for improving my teaching and making my teaching better. One of those ideas is, for example, like building teaching authorities, which I regard as very necessary. Nevertheless, all those perspectives should build upon the premise 'make sure every child well-educated', instead of simply controlling your class, making your teaching easier and therefore not considering the needs of your pupils.*

the changes  
of teaching  
beliefs

care the  
need of  
pupils

pupil

pupil

**As far as you are concerned, what is the biggest challenge you encounter in your teaching practice period?**

*I think that it should be teaching. I think that teaching is not simple indeed. If you want to make your teaching efficient, helping your pupils learn well, you have to*

*properly manage your class. In addition, you have to understand every pupil, and properly handle the contingencies you encounter. Moreover, you have to be responsible for the learning of your pupils, particularly letting the parents understand that you are a professional teacher. Nowadays in Taiwan teachers are demanded to tailor their teaching to making learning more interesting. Thus you have to be more creative and keep pupils motivated in learning. This is really difficult and is the ability I need to improve.*

care the  
need of  
pupils

### **How do you face these challenges? Can you give more examples?**

*From the beginning of teaching practice period, my mentor recommended me that I could particularly observe how pupils behave and what they talk. When necessary, she asked me to do remedial teaching for some pupils. She also reminded me that I have to pay more attention to some particular pupils and told me how I could handle them. The parents of these pupils might be the factors which caused them behave inadequately in the classroom. For example, when I was in the classroom, one parent all of the sudden appeared near my classroom, indicating that she needed to talk with me. At that moment, my mentor wasn't in the classroom so I had to cope with this situation. That parent asked me how her child behaved recently and then wanted me to take care more about her child. She reminded me again that her child sometimes made mistakes and disturbed his classrooms, but he is intuitively innocent. But, to be frankly, I regarded her child as devil in my class. He not only had bad relationships with his classrooms but demonstrated his academic performance under average and always failed to complete his homework. Afterwards I asked my mentors how to deal with this case. She told me that I didn't need to care too much on the comments of parents. All I have to do now is to do at my best what a teacher should do, and not to allow her to interrupt my teaching. My mentor promised that she could handle this affair properly. A parent like this is likely to have the same kind of children.*

personal  
teaching  
beliefs

### **Then do you ask your teacher about how to deal with this kind of thing?**

*Yes, she told me that I should understand more the disposition of every child then I could handle well and persuade their parents. This is indeed kind of art. You have to know how to cope with contingencies. It is not easy to be a good teacher. There are tons of things to deal with in the classroom.*

personal  
teaching  
beliefs